

# REPORT

OF THE

## COMMISSIONERS OF THE DISTRICT OF COLUMBIA

FOR THE

YEAR ENDED JUNE 30, 1901.

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VOL. II.

[ENGINEER DEPARTMENT.]

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1901.



EXTRACT FROM THE REPORT OF THE COMMISSIONERS OF THE  
DISTRICT OF COLUMBIA FOR THE YEAR ENDED JUNE 30, 1901.

OFFICE OF THE COMMISSIONERS  
OF THE DISTRICT OF COLUMBIA,  
*Washington, November 1, 1901.*

The PRESIDENT:

The Commissioners of the District of Columbia herewith submit, for the information of Congress, as required by law, their annual report of the official doings of the government of said District for the fiscal year which ended June 30, 1901.

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OPERATIONS OF THE ENGINEER DEPARTMENT.

During the fiscal year the engineer department was under the charge of Capt. Lansing H. Beach, Corps of Engineers, U. S. A. He had as assistants Capt. D. D. Gaillard, Capt. H. C. Newcomer, and Capt. Chester Harding, of the Corps of Engineers. Captain Gaillard served until March, 1901, when he was ordered to take charge of the engineer office at Duluth, Minn., and was succeeded here by Captain Harding.

STEAM RAILROADS.

The Commissioners feel it to be a cause of congratulation that the District is at last to have railroad facilities in keeping with the dignity of the national capital. Congress has passed acts requiring the abolition of grade crossings, the removal of the Long Bridge, and the erection of suitable terminal facilities for the city within five years. Plans for a part of these great undertakings have already been prepared and submitted to the Commissioners for approval, and approved, as required by law.

Shortly after the passage of the acts of Congress referred to above, the Pennsylvania Railroad Company secured a controlling interest in the Baltimore and Ohio Company. This change of relations between the two companies has brought apparently within reach still further improvements long desired by those who have the welfare of the city at heart. A union station, accommodating all steam railroads entering the city, together with the clearance of tracks and stations from the Mall, in addition to the abolition of grade crossings, seem to be within sight.

It is believed that the Pennsylvania Railroad Company is willing to do its share in accomplishing these desired objects. Shortly after the consolidation of interests referred to above, its officers intimated to the Commissioners that they were aware there was more or less sentiment in favor of the establishment of a union passenger station in Washing-

ton and they realized it would be desirable to have such a station, if the same could be established in fairness to all the railroad interests and the public, although the problem was a very difficult one to work out. They suggested that the only proposition they had been able to figure out, that would be satisfactory to all interests, would be to connect the Baltimore and Ohio Railroad lines on Delaware avenue with the Pennsylvania tracks on Virginia avenue by means of a double-track tunnel from the ground just north of C street NE., thence following the line of First street east to B street south, thence curving into Virginia avenue near First street west. This would permit the establishment of a through station on the site of the Baltimore and Ohio Railroad Company's terminal property at Delaware avenue and C street NE., and would contemplate the rebuilding of the Baltimore and Potomac Railroad through Washington as already authorized by Congress, with the exception of the branch and station on the Mall.

A large union station could thus be provided on an eligible site, with a through station and a stub station—the railway company deeming the latter a necessary essential in Washington—because the bulk of the traffic from the North stops at Washington, and the bulk of the traffic from the South also stops at Washington, but, of course, it would be necessary to have a through connection for the through North and South passenger trains, as otherwise it would mean a long detour.

The Commissioners at once took up the matter and a study was made of the project as outlined above. No insurmountable engineering difficulties were found to be in the way, and the Commissioners feel safe in stating that the project is not only entirely feasible, but that it offers a practical solution of two problems that have confronted the city for years, namely, the clearance of the Mall of railroad obstructions and the erection of a union station accommodating all railroads entering the city; and they recommend that the necessary legislation be enacted at as early a date as possible to secure these great improvements in terms which shall be satisfactory to the District of Columbia.

#### STREET AND ALLEY PAVEMENTS.

The materials used for street pavements during the year were asphalt, asphalt block, and macadam; 40,832 square yards of sheet asphalt, 17,353 square yards of asphalt block, and 82,806 square yards of macadam being laid. This was all new work upon streets heretofore unprovided with improved pavement. In connection and addition to the above, 306,000 cubic yards of grading was accomplished. The prices paid were, for sheet asphalt on 6-inch concrete base, \$1.79½ per square yard, and for asphalt block on gravel base, \$1.77 per square yard. For the coming year the prices will be \$1.72 for sheet asphalt and \$1.77 for asphalt block.

Vitrified block and asphalt block were used for paving alleys, about 12,000 square yards of the former and 13,000 square yards of the latter being laid. This work was done by day labor.

The recommendation is renewed that all granite-block pavements in the city be replaced as rapidly as possible with sheet asphalt or asphalt block. Objections to the rough and noisy granite-block pavements are being continually received, and under the conditions prevailing in Washington, where smooth pavements are the rule, it is believed that relief should be afforded.



## SIDEWALKS.

During the year 67,176 square yards of cement sidewalk were laid, and 4,035 square yards of brick sidewalk. The prices for cement sidewalk were \$1.05½ and \$1.18¾ per square yard, the latter price prevailing upon streets in the county not provided with roadway pavements. For the coming year the prices will be 89 cents and \$1.07 per square yard, respectively.

The amount of brick walk laid has steadily decreased from year to year. The first cost of a brick walk is but little less than one of cement, while the advantages of the latter are incomparably greater. It is almost impossible to maintain a smooth brick sidewalk in Washington on account of tree roots which grow up under the pavement and displace the bricks. The cement walk, however, is not so easily affected, although with some variety of trees—notably the Carolina poplar—the surface growth of roots is often sufficient to lift even the heavy blocks of cement. Largely on this account, as well as on account of other undesirable qualities, the Carolina poplars are removed when new sidewalks are laid contiguous to them, and a better kind of tree planted in their places.

The office has been embarrassed in a number of cases during the year by a judicial decision to the effect that real estate exempted by law from the payment of general taxes is, by the same law, also exempt from special assessments. As the office has no means at its command to pay for laying a walk in front of such property, the result has been that when such a frontage was encountered arrangements have had to be made with the property owners for the execution of the work upon a deposit by them of one-half the estimated cost, in advance, as otherwise the pavement in front of such premises would have to be omitted. This has, in several cases, caused serious inconvenience to the public, and badly needed work has had to be left undone. It is believed that no exemptions whatever from assessment for work of improvement should be made and that when any property receives the benefit of new curb, sidewalk, sewers, or alley paving, it should bear its proportional half of the cost and not throw the entire expense upon the taxpayers.

## BRIDGES.

Attention is again respectfully invited to the need of a better bridge in place of the present navy-yard bridge over the Anacostia River. The present bridge was built in 1875. It is unsightly, much too narrow, and structurally unfit for the heavy traffic imposed upon it. The recommendation is renewed that it be replaced by a modern structure at as early a date as possible.

The act making appropriations for the sundry civil expenses of the Government for the fiscal year 1901 contained the following item under the head of Zoological Park:

For the construction of a bridge across Rock Creek on the line of the roadway from Quarry road entrance, under the direction of the Engineer Commissioner of the District of Columbia, \$22,000, one-half of which shall be paid out of the revenues of the District of Columbia.

The old bridge was built of timber and iron and was in an unsafe condition. Plans for the new bridge were prepared by the Melan Arch Construction Company, under the direction of this office, and the

bridge has been completed, with the exception of sidewalks and the grading of the creek, for which purpose a balance of \$775 of the appropriation remains available. The bridge is constructed of concrete throughout with a cement mortar face. It consists of a single arch of 80-foot span with a roadway 19 feet wide and two 6-foot sidewalks.

Under the emergency appropriation to repair damages done by the storm of June 2, 1900, a concrete-steel bridge with granite face has been erected over Piney Branch on the line of the drive along Rock Creek in place of the bridge washed away. The new bridge has a span of 24 feet and a roadway 23 feet wide.

Contract has also been entered into for the construction of a concrete arch bridge over Broad Branch on the line of Argyle road. This work is now in progress. The bridge will have a span of 24 feet and a roadway 23 feet wide. Mr. Glenn Brown, assisted the office in preparing the plans for this work.

The \$40,000 appropriated on account of the Connecticut avenue bridge across Rock Creek will enable the office to complete the foundations of all the piers, from two to nine inclusive.

Fifty thousand dollars was provided on account of work on the Massachusetts avenue bridge over Rock Creek. This makes a total of \$225,000 for the bridge and will be sufficient to complete it. It is expected that the masonry arch of the bridge will soon be completed, after which a fill of 250,000 cubic yards will be necessary in order to provide a roadway over the arch, which is constructed as a very large culvert.

#### SEWAGE DISPOSAL PROJECT.

Under the appropriation for the "Preparation of detailed plans and specifications for sewage disposal system complete" the survey for the various trunk sewers, the inverted siphon crossing the Anacostia River, and the pumping station have been completed. The surveys for land to be acquired for the construction of the outfall sewer have not been fully completed.

The sizes, gradients, and sections of the trunk sewers and inverted siphon have been designed and the estimates of cost have been made. Detailed sheets of the various portions of the work and specifications for the same are being prepared, and they will be completed in all probability within the present fiscal year. The work upon the project has followed the general lines indicated in the report of the Board of Sanitary Engineers of 1890, with such modifications as additional study of the situation indicated.

For example, the amount of rainfall to be provided for by the large trunk sewer in B street and New Jersey avenue has been increased, thereby increasing the size of that sewer and also the capacity of the pumping machinery at the pumping station. The line has been changed from B street eastward at Tenth street to avoid the crowded streets adjacent to the Center Market and the Pennsylvania Railway station, the new line crossing the Mall and joining the line originally proposed in Third street near Maryland avenue. The outlet section of the Four-and-a-half street sewer has been changed in location from M street to L street. The location for the inverted siphon has been changed, so that its axis is about normal with the proposed channel lines, and its length has been considerably reduced. Several trunk lines have been added to the project. First, a trunk sewer to provide the properties

within the low section of the city adjacent to Pennsylvania avenue NW., between First and Fifteenth streets, with adequate sewerage facilities for cellars; second, the extension of the east side intercepting sewer from Twelfth street east to Twenty-first street; third, the extension of the northeast boundary sewer from its present outlet to a point near Twenty-first and A streets NE. Work is now in progress upon the east side intercepting sewer, the extension of the boundary sewer, the lower section of the sewer to drain the low area, and the outlet section of the Tiber Creek and New Jersey avenue high-level intercepting sewer.

A contract for furnishing the pumps, boilers, and appurtenances for the pumping station has been made with the Allis-Chalmers Company, of Milwaukee.

Messrs. Didden & Vogt were engaged, after an open competition, as architects to prepare plans for the pumping station.

The estimated amount required to complete the project, in addition to the amounts heretofore appropriated, is \$2,620,097.50.

The expenditures to date on account of completed work aggregate \$520,473.04.

The appropriation to date on account of work in progress aggregates \$1,362,000.

#### STREET RAILWAYS.

Under the provisions of acts of Congress the Capital Traction Company extended its lines eastward on Pennsylvania avenue from Eighth street SE. to the Anacostia River; also along F and G streets from Seventeenth street westward to Twenty-fifth and Twenty-sixth streets and thence north to Pennsylvania avenue; also on First street NE. between B and C streets. These lines have been completed and are now in operation.

A great many complaints have been received during the year on account of the abandoned street-railway tracks in various parts of the city. The office has been in communication with the railway companies for a year or more, endeavoring to have the tracks removed, with the result that the work has at last been undertaken.

The law requiring the removal of abandoned tracks imposes a fine of only \$10 a day for each day the tracks are permitted to remain after a sixty days' notice to remove them, a penalty entirely inadequate to command the respect of the railway companies or to accomplish the purpose of the law. It is believed the fine should be at least \$100 a day instead of \$10, and in addition that the law should provide that upon failure of the company to perform the work directed, within a prescribed time, the District should have authority to do it, issuing certificates of indebtedness against the companies in payment of the expense involved.

#### BUILDINGS AND BUILDING INSPECTION.

The report of Mr. John B. Brady, inspector of buildings, for which see page 146, gives detailed information concerning building operations during the year.

Numerous complaints were received during the year from builders and architects of the inconvenience and loss of time incurred in securing permits and having plans examined in the office of the inspector of

buildings. This was largely due to the utter inadequacy of the force of the office to meet the heavy demands upon it, and partly to the system made necessary by the law concerning permits for projections beyond the building line. Since the first of the present fiscal year the office force has been somewhat augmented, as provided for by Congress, and the conditions are considerably better than they were formerly, although the force is still insufficient to properly attend to the business of the office, and in the annual estimates increases have been recommended which are believed to be necessary for the good of the service.

With regard to projections beyond the building line, the law provides that permits for these shall be issued only upon the concurrence of the three Commissioners and the Secretary of War. Each application has to go through the following routine: First, it is submitted to the inspector of buildings, who sees that it conforms to the building regulations and then forwards it to the Commissioners, by whom it is individually approved if considered advisable, and then the application is sent to the Secretary of War; he returns it to the office of the Commissioners, and, if approved, the building inspector thereupon issues the permit. This process takes from a week to ten days—a delay which causes a great deal of irritation to those applying for the permit. But, inasmuch as the permit finally obtained gives the applicant the use of a piece of Government land absolutely free of charge, it is believed that the cases can not be too closely scrutinized, especially in view of the fact that the tendency is to take every square inch that can possibly be obtained under the schedule of projections, and quite often to try to secure still more.

The Commissioners believe that it has proved a mistake to grant projections as liberally as has been done in the past. It is the rare exception that anyone builds a house without taking advantage of the privilege of obtaining a few feet of land without cost, and the result is that many of the streets of Washington which were noted for their breadth and beauty are now lined with long rows of bay windows and their width considerably reduced.

#### STREET TREES.

The history of tree planting in Washington is embraced in a period covered by the last thirty years, as previous to 1871 trees were planted without system and generally at individual expense. On account of the wide roadways and scattered improvements, trees were located near the houses and were few in number. The narrowing of the roadways and the planting of trees along the curb line was inaugurated by a public act approved April 6, 1870.

The present system of tree planting under the District authorities was instituted in September, 1871, by the board of public works, and all trees now at the curbs have been put there since that date. A commission, consisting of William R. Smith, William Saunders, and John Saul, acted, by request, as an advisory board during the early years of planting. The report of this commission in 1872 recommended as best for curbstone trees the silver maple, the American linden, European sycamore maple, the American elm, the tulip tree, the sugar maple, the sweet gum, the red maple, the Norway maple, the negundo, the American ash, and the plain trees. During later years

(since August, 1884) Mr. Trueman Lanham has acted as superintendent of parking, having charge of the planting and care of street trees and making a close study of the work under his supervision.

These thirty years of tree planting furnish a thorough test of the varieties of trees best adapted to city streets, and as a result of this experience there has been a gradual evolution in regard to the selection of trees as well as in their care and the mode of planting.

Trees are now spaced much farther apart, and more care is taken in supplying rich soil around the roots. Because of frequent attacks from insects or on account of destructive effect on pavements certain varieties are being removed or replaced as fast as circumstances allow. Trees classed as quick growers are now demanding great attention, as they are generally short lived and need close trimming to prevent breaking by storms or early decay.

The Carolina poplar, the locust, the negundos, and the aspen poplar are all objectionable as city trees, the first named being very destructive to pavements and sewers, while the last two are continually subject to attacks by caterpillars. The constant removal of trees necessitated by the above conditions or by the widening of roadways or sidewalks has caused an agitation for the planting of larger and more fully developed trees. Paris has been cited as an example of such work, where old trees, it is claimed, are transplanted with success. The report of the parking commission for the year 1872 mentions the removal of 60 large trees and states that the operation is not commended. It is quite possible to remove large trees with success where they are planted in a park or field or where the question of expense is not considered. It can hardly be made a success, however, where trees are planted close to the curb; and the expense attending the mere planting of such trees would be enormous, because of the improvements in the sidewalk and roadway which would have to be removed and replaced. It can also be stated that under the most favorable conditions in removing large trees the results are not worth the expense, as such trees are short lived and rarely healthy.

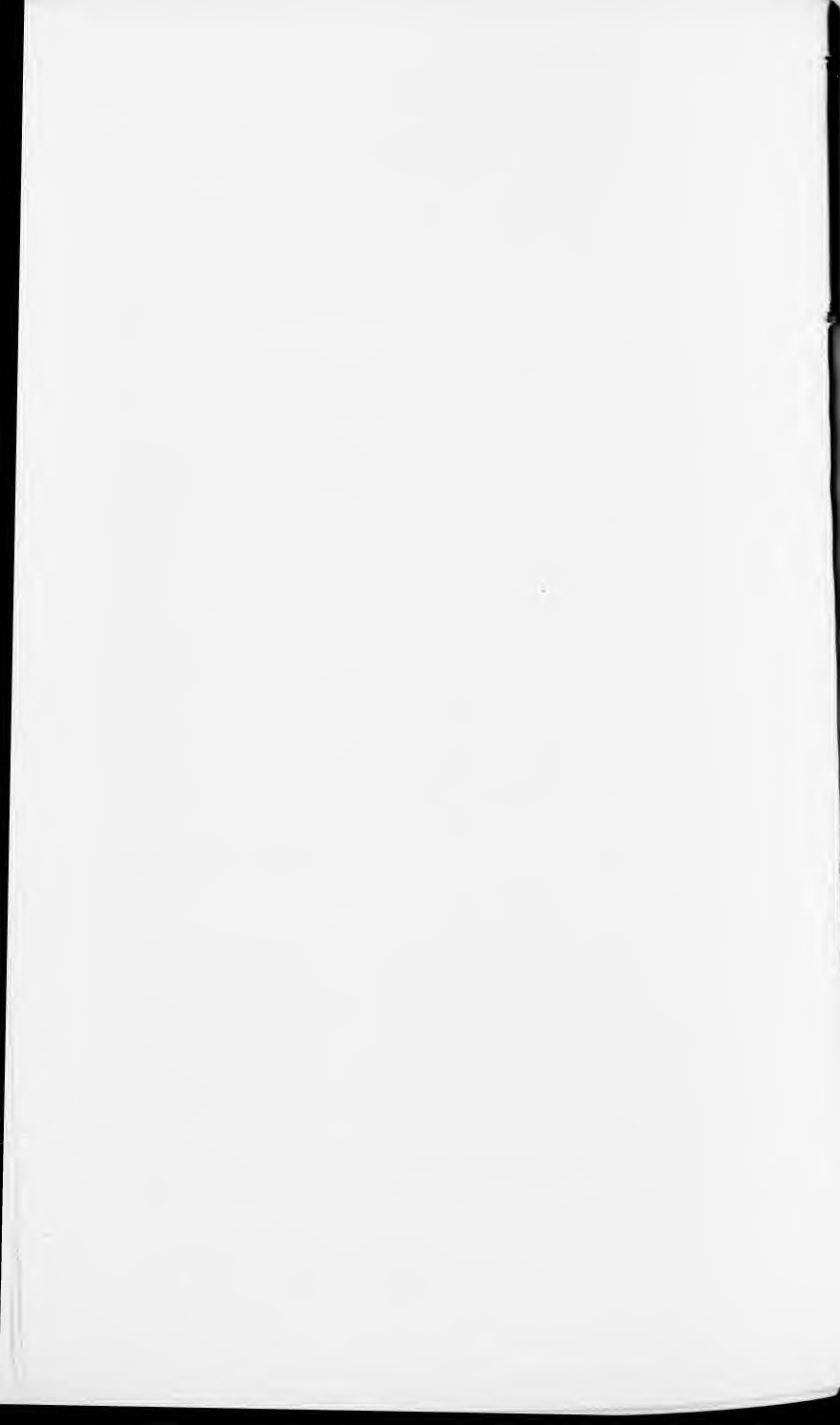
No fair comparison can be made between the methods of planting in Paris and those that prevail in this city. Paris, with a population many times larger than Washington, cares for less trees and expends double the amount of money in their culture. Here tree planting is general, covering the entire city; there it is confined to parks and wide avenues. Certain publications on Paris trees state that each tree represents an expenditure of \$50. Here each tree stands for an expense of \$6. As a comparison of results it may be stated that close observers of both cities have pronounced the trees of Washington to be superior in foliage, healthfulness, and general appearance. There is no doubt, however, that the present appropriations are too small to give the trees here the care and attention required, the yearly allowance per tree being only about 25 cents. The trees now cared for by the District number about 80,000.

In conclusion, it is deemed only fitting to acknowledge the good work of the assistants and of the clerical force of the various departments of the office, who have not spared themselves in carrying out their duties to the best of their ability.

Very respectfully,

HENRY B. F. MACFARLAND,  
JOHN W. ROSS,  
LANSING H. BEACH,

*Commissioners of the District of Columbia.*



# REPORT OF THE OPERATIONS OF THE ENGINEER DEPARTMENT.

## SURFACE DIVISION.

Capt. H. C. NEWCOMER,

*Corps of Engineers, United States Army, Assistant to the Engineer Commissioner, in charge.*

|                                                        |                                                        |
|--------------------------------------------------------|--------------------------------------------------------|
| STREETS, PAVEMENTS, GRADES, AND CONSTRUCTION OF ROADS, | CONWAY B. HUNT,<br><i>Computing Engineer.</i>          |
| SIDEWALKS AND ALLEYS.....                              | H. N. MOSS,<br><i>Superintendent of Streets.</i>       |
| MAINTENANCE OF COUNTY ROADS.....                       | MORRIS HACKER,<br><i>Superintendent of Roads.</i>      |
| CONSTRUCTION AND CARE OF BRIDGES.....                  | WALTER J. DOUGLAS,<br><i>Engineer of Bridges.</i>      |
| SURVEYOR'S OFFICE.....                                 | H. B. LOOKER,<br><i>Surveyor, District of Columbia</i> |
| PARKING COMMISSION.....                                | TRUEMAN LANHAM,<br><i>Superintendent of Parking.</i>   |

## REPORT OF ASSISTANT IN CHARGE.

OFFICE OF THE ENGINEER COMMISSIONER,  
DISTRICT OF COLUMBIA,  
*Washington, September 24, 1901.*

CAPTAIN: I have the honor to transmit herewith annual reports giving in detail the operations during the fiscal year ending June 30, 1901, of the surface division, the surveyor's office, and the parking commission, namely, report of the computing engineer, including reports of the superintendent of streets, superintendent of roads, and the engineer of bridges; report of the surveyor, District of Columbia; and report of the superintendent of parking.

In submitting these reports I desire to invite attention to a few matters of special importance affecting the work under my charge.

The computing engineer refers to the difficulty attending assessment work, such as setting new curb, laying sidewalks, or paving alleys, when it abuts property owned by churches and other organizations exempt from taxation. The law provides that one-half the cost of such work must be paid by the owners of abutting property, either by deposit prior to execution of work or through subsequent assessment and collection. The Commissioners are empowered to order the execution of such work when it is required in the interests of public health, safety, or comfort. The District court of appeals decided October 25, 1899, that property such as that described above is exempt from special assessment for local improvements as well as from general taxation. The authorities are powerless, therefore, in such cases to do work of this character unless the parties representing the property voluntarily deposit the half cost in advance. This they sometimes refuse to do, and thus prevent work that is much needed in the interests of the general public. It is recommended that necessary legislation be secured to permit the assessment of such property in the same manner as private property for work of this character.

The report of the surveyor of the District of Columbia invites attention to the manner in which the operations of his office are hampered by the failure to provide in the annual appropriation bill a sufficient sum to meet the demands of an ever-increasing volume of work. This requires each year that the regular appropriation be supplemented by provision made in the deficiency bill. The needs of

the office are so well defined and the importance of the work so obvious that adequate provision for its annual maintenance should be made in the regular appropriation bill in the same manner as for other departments.

The urgent need of larger appropriations for the parking commission must be apparent to anyone familiar with the extent of its work. There are some 82,500 trees already planted and in need of frequent attention. To cultivate these trees, to replace those dying or destroyed, to protect the younger ones with wooden boxes and the older ones with wire netting, to trim the trees suitably, to protect them from the ravages of destructive worms and insects, would a one more than exhaust the usual appropriations if the trees received all the care needed for their best development. Already there are frequent criticisms of the work that are unjust only because they demand more from the officials in charge than available funds will enable them to do. Besides the trees, which constitute the chief object of the commission's work, there is the care of parking spaces which makes ever-increasing demands upon the limited funds. Moreover, the growth of the city inevitably leads to most urgent requests for extensions in the lines of trees, and the newer sections should not be deprived of this feature that constitutes one of the principal elements in the beauty of the city. It is confidently believed that no other expenditure of an equal amount could contribute as much to the comfort and pleasure of residents and guests in the city, and it is earnestly recommended that increased appropriations be made commensurate with the needs and importance of the work.

Very respectfully,

H. C. NEWCOMER,

*Captain, Corps of Engineers, U. S. A.,  
Assistant to Engineer Commissioner District of Columbia.*

Capt. LANSING H. BEACH,

*Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.*

## REPORT OF THE COMPUTING ENGINEER, DISTRICT OF COLUMBIA.

WASHINGTON, D. C., July 1, 1901.

CAPTAIN: I have the honor to submit the following report of the operations of the surface division of the engineer department of the District of Columbia for the fiscal year ended June 30, 1901:

*Summary statement of work under appropriations for "Improvement and repairs" and "Construction of county roads and suburban streets."*

|                                       | Improve-<br>ment and<br>repairs. | County<br>roads and<br>suburban<br>streets. | Paving<br>roadways,<br>permit<br>system. | Total.    |
|---------------------------------------|----------------------------------|---------------------------------------------|------------------------------------------|-----------|
| Asphalt, 6-inch base.....square yards | 20,756.53                        | 17,612.35                                   | 2,463.92                                 | 40,832.80 |
| Vitrified-block gutters.....do        | 4,482.41                         | 2,761                                       | 306.76                                   | 7,640.17  |
| Asphalt block.....do                  | 10,483.52                        | -----                                       | 6,870.11                                 | 17,353.63 |
| Macadam.....do                        | 41,025                           | 41,781                                      | -----                                    | 82,806    |
| Cobble gutters.....do                 | 14,423.54                        | 11,134                                      | -----                                    | 25,557.54 |
| Ordinary grading.....cubic yards      | 33,195                           | 259,212                                     | 7,850                                    | 300,257   |
| Macadam grading.....do                | 4,116                            | 1,753                                       | -----                                    | 5,849     |
| Old cobble removed.....linear feet    | 12,188                           | 1,148                                       | -----                                    | 13,336    |
| Old curb removed.....do               | 10,971.22                        | 49.40                                       | -----                                    | 11,020.62 |
| Curb set.....do                       | 39,309.07                        | 8,510.20                                    | -----                                    | 47,819.27 |
| Curb reset.....do                     | 7,495.15                         | 156.91                                      | -----                                    | 7,652.06  |

In the report of the superintendent of streets all day-labor work under the appropriation for "Repairs to streets" is consolidated. It seems proper to segregate certain items of work, which are accordingly itemized as follows: The roadway of Bates street, between First street W. and North Capitol street, was macadamized and provided with cobble gutters; the roadway of B street NE., from Twelfth to Fourteenth streets, was graveled and provided with cobble gutters; general repairs were made to the asphalt block roadways of D street SE., from Second to Third streets; Seventh street NE., from North Carolina avenue to East Capitol street, and Maryland avenue NE., from Eighth to Twelfth streets; the roadway of S street NW., from Thirty-fourth to Thirty-fifth streets, was macadamized and provided with cobble gutters; the roadway of L street SW., from Second to



Four-and-a-half streets, was spiked, graveled, and rolled; the roadway of E street SE., from Sixth to Seventh streets, was generally repaired and rolled and the gutters relaid; the roadway of Sixth street NE., between L and M streets, was regaveled and the cobble gutters relaid; the roadways of F street NE., between Thirteenth and Fourteenth streets, and of Fourteenth street NE., between E and F streets, were macadamized and provided with cobble gutters; the roadway of U street NW., adjacent to the Western High School grounds, between Thirty-fifth and Thirty-sixth streets, was macadamized and provided with cobble gutters; the roadway of G street NE., from Fourteenth to Florence streets, was graveled and rolled and provided with cobble gutters; the roadway of First street SW., from N to V streets, was spiked, graveled, and macadamized and rolled; the roadway of Fourteenth street NE., from F street to Maryland avenue, was macadamized and provided with cobble gutters; the roadway of I street SW., between First street and Delaware avenue, was macadamized and the gutters relaid; the roadway of Twelfth street NE., from C street to Maryland avenue, was macadamized and provided with cobble gutters, and the roadways of Virginia and Georgia avenues SE., between Ninth and Eleventh streets, and of Ninth street SE., from Georgia to Virginia avenues, were macadamized and rolled and the gutters relaid.

The principal items of work under the appropriation "Repair to roads" were: The grading of Providence street between Thirteenth and Fifteenth streets; the macadamizing of Trinidad street, in King's subdivision of Trinidad; the macadamizing of Concord street between Tenth and Thirteenth streets, Brookland; the macadamizing of Flint street, Brightwood Park; the macadamizing of Klinge road from Linnean Hill road to Rock Creek, and the macadamizing of Newark street from Wisconsin avenue eastward.

The following is a list of tables appended with this report:

Table A.—Street railways in the District of Columbia, July 1, 1901.

B.—Statement of character and extent of street pavements, July 1, 1901.

C.—Statement of mileage of street pavements, July 1, 1901.

D.—Descriptive list of street pavements and suburban roadways, giving character, extent, cost, etc.

E.—Schedules of work on streets and avenues and county roads and suburban streets.

F.—Repairs to asphalt and concrete pavements for year ended June 30, 1901.

G.—Work done at cost of railroad companies.

H.—Work done by day labor under appropriation for "Current repairs to streets, avenues, and alleys."

I.—Regular permit work.

L.—Replacing and repairing sidewalks and curbs around public reservations.

M.—Miscellaneous work.

N.—Whole cost work.

O.—Repairs to cuts by plumbers and others.

As an incident to the expenditure, by contract, of the bulk of the appropriation for "Improvement and repairs," "Repairs to concrete pavements," and "Construction of county roads," and on account of other appropriations not under the control of the surface division, there were executed miscellaneous items of work by day labor during the year, as shown in detail in Table M. This work amounted to \$39,763.64.

The reports of the superintendent of streets, superintendent of roads, and the engineer of bridges are transmitted herewith.

Under a special authorization contained in the current appropriation bill, bids were received for operating the District quarry at Dickerson, Md., for terms of one, two, three, and five years, and a contract for a five-year term was executed with the Standard Lime and Stone Company, of Baltimore, Md., Mr. Daniel Baker, president, at very advantageous rates. Under this contract the quarry was operated during the past year with a largely increased output over the preceding year, due in a large part to the peculiar circumstance that under the operation of the schedule for improvement and repairs a large amount of macadam had to be supplied on streets provided to be graded and regulated. For the ensuing and succeeding years the number of graded and regulated streets on the schedule are relatively few, and the demands on the quarry from this source will be very greatly reduced. On the other hand, it is hoped that appropriations for repairs to streets and repairs to roads will be of such proportions as will enable full advantage to be taken of this large supply of first-class construction material at a practically constant rate.

Another provision of the current appropriation bill which resulted in large practical advantages was that which authorized the transfer to the credit of a

succeeding fiscal year of the unexpended balances of the appropriations for paving roadways under the operation of the schedule whenever such balances were insufficient to complete the paving of the next square that would be reached on the schedule. In addition to the advantages directly to the office, it is confidently believed that this provision will work to the advantage of the contractor for street paving in that the limit of his work can be more definitely foreseen, and that this fact will redound to the District's benefit in the price bid for future work.

A notable item of paving work within the city was the widening of the roadway of G street NW. from Fifth to Seventh streets, from Ninth to Tenth streets, and from Fourteenth to Fifteenth streets, to a width uniform with that of the balance of the street—50 feet. Most of this work was done under the provision of a special appropriation therefor, but the square between Fifth and Sixth streets, not being included in that appropriation, was authorized from the general appropriation for "Repairs to streets," and the result of these operations has been a great public convenience.

The operations of grading streets, alleys, and roads by the labor of the inmates of the Washington Asylum, although economically conducted, were of necessity suspended, for lack of funds, before the expiration of the fiscal year, leaving a long list of authorized but unfinished work. As this work is at present administered so many advantageous improvements can be accomplished that would otherwise be practically impossible that in the interest of economy the appropriation should be increased from \$8,000 to \$10,000, as it is found that this latter sum is necessary to keep a well-proportioned force continuously employed throughout the year.

On account of its notably defective condition the large paved area of roadway at the intersection of Louisiana avenue, Seventh and C streets, was resurfaced during the year and advantage was taken of this general treatment of the locality to create a circular park about 100 feet in diameter, occupying the center of the intersection, with convenient roadways around it, resulting in a distinct improvement in appearances and in every other respect, and at a reduced cost of construction over the repaving of the entire original roadway.

The appropriation for "Repairs to streets" was expended on the general lines followed during preceding years, and the resurfaced streets are among the best in the District. The other asphalt and coal-tar pavements were maintained by minor repairs in excellent condition, no reasonable expense being spared. The cost of such minor repair work during the year was \$40,454.38.

The general appropriation for "Construction of county roads" for the current year contained 16 separate subheads. For the ensuing fiscal year this same general appropriation contains 25 subheads. As each subhead is specific as to the location and limits of the work for which it provides, a very great practical advantage and both direct and indirect economy would result if legislative authorization could be secured that the total of the general appropriation shall be disbursed and accounted for as "Construction of county roads," and for that purpose it shall constitute one fund. Precedent for this is found in the case of "Subsistence of the Army" (act of March 2, 1901), and the analogy therefor in the appropriations made in our annual appropriation bills for paving streets in the various sections under the operations of the improvement and repair schedule. The practical difficulties of making from 16 to 25 separate estimates conform in execution to the needs of each street without excess or deficit in any item are very great. These could all be avoided without any additional cost if the provision recommended be made. It can be stated that this recommendation has the concurrence of the District accounting officers.

The sum of \$3,000 for the improvement of Adams's Mill road, which was reappropriated by Congress, was expended during the year in bringing this road to the approved grade, including in these operations the area of the original road and such additional area as could be secured with the appropriation of \$5,000 (similarly reappropriated), for the purchase and condemnation of land necessary to widen the road in accordance with the plans for street extensions.

The appropriation act for 1901 contained an item for \$10,000 for paving roadways under the permit system. Such a provision has been made in previous years, but had been interrupted for several successive years, and its renewal was marked by an immediate pressure for the allotments that could be made within the limits of the appropriation to such an extent that a much larger sum could have been advantageously and easily expended.

The streets paved during the year under this appropriation were S street NW., from Phelps place to Twenty-third street; Flagler place, from U to Albany streets; and Baltimore and Twentieth streets, from Nineteenth street to Cincinnati street.

The extension of the lines of the Capital Traction Company eastward along Pennsylvania avenue, from Eighth street to the Eastern Branch; along F and G

streets, from Seventeenth street westward; and along Twenty-fifth and Twenty-sixth streets northward to Pennsylvania avenue; and on First street NE., between B and C streets, were all completed during the year, in accordance with legislative authorization.

The detailed plans prepared in accordance with the public act of February 12, 1901, for the elimination of grade crossings on the lines of the Pennsylvania Railroad, were approved by the Commissioners of the District on June 1, 1901. Active construction operations on this work are anticipated in the near future.

In the execution of assessment work serious embarrassment has resulted from the judicial decision that property exempted by law from general taxes is likewise exempt from special assessments. This office has not understood that the appropriation for assessment work could properly be expended in front of such property in view of this decision, and the result has been that when such a frontage is encountered arrangements have had to be made with the owners of such property for the execution of the work in their frontages under the permit system by the deposit of the half cost in advance, or else the work on these frontages has had to be omitted, causing more or less, and frequently quite serious, public inconvenience.

The current routine work of the office has been kept up to date during the year, and my acknowledgments are due to the force engaged for the results accomplished.

C. B. HUNT,

*Computing Engineer, District of Columbia.*

Capt. LANSING H. BEACH,

*Corps of Engineers, U. S. A.,*

*Engineer Commissioner, District of Columbia.*

(Through Capt. H. C. Newcomer.)

## REPORT OF THE SUPERINTENDENT OF STREETS.

WASHINGTON, July 1, 1901.

SIR: I have the honor to submit herewith the annual report of the operations under my charge for the fiscal year ended June 30, 1901.

Table H is a summary of work done (by day labor, except cement sidewalks) under the appropriation for "Current repairs to streets, avenues, and alleys." The cost of this work was \$26,392.09. Of this amount about one half was sidewalk and alley work and the other half repairs to street roadways.

During the year there were 2,524 dangerous holes repaired, aggregating 24,365 square yards, at a total cost of \$9,341.72.

Table I is a list of work done under the permit system, by which the property owners requested the improvements and paid one half the cost, the District paying the other half. Total, \$24,360.13.

Table K is a list of work done under the assessment system; one-half the cost of work ordered under this system is charged against the abutting property, and becomes a lien upon said property. Total cost of such work was \$179,421.61.

Table L is a list of the work done out of the appropriation for "Replacing and repairing sidewalks and curbs around public reservations and municipal buildings." The amount expended under this head was \$7,040.56.

Table N is a list of work done in public space for private parties, for their sole benefit and use, for which they pay the entire cost. Deposit to cover the estimated cost of the work is required in advance of the work being done. This work amounted to \$475.05.

H. N. MOSS, *Superintendent of Streets.*

The COMPUTING ENGINEER DISTRICT OF COLUMBIA.

Respectfully transmitted to the Engineer Commissioner District of Columbia, through Capt. H. C. Newcomer.

C. B. HUNT,

*Computing Engineer District of Columbia.*

TABLE A.—*Street railroads in operation in the District of Columbia, July 1, 1901.*

| Name of company.                                          | Tracks in use, owned by company. |               |                    |               |
|-----------------------------------------------------------|----------------------------------|---------------|--------------------|---------------|
|                                                           | Underground electric.            |               | Overhead electric. |               |
|                                                           | Double.                          | Single.       | Double.            | Single.       |
| Washington Traction and Electric Co.:                     | <i>Miles.</i>                    | <i>Miles.</i> | <i>Miles.</i>      | <i>Miles.</i> |
| Metropolitan Railroad.....                                | 9.31                             | 3.98          | .....              | .....         |
| Columbia Railway.....                                     | 2.77                             | .....         | 4.12               | .89           |
| City and Suburban Rwy. of Washington.....                 | 4.06                             | 2.36          | 5.58               | .....         |
| Brightwood Rwy.....                                       | .....                            | .....         | 5.93               | .....         |
| Georgetown and Tennallytown Rwy.....                      | .....                            | .....         | 4.16               | .....         |
| Anacostia and Potomac River R. R.....                     | 6.52                             | .....         | 1.46               | 1.64          |
| Washington and Great Falls Electric Rwy.....              | .....                            | .....         | 3.88               | .....         |
| Washington and Glen Echo R. R.....                        | .....                            | .....         | .10                | .....         |
| Capital Traction.....                                     | 13.44                            | 3.26          | 3.57               | .....         |
| Baltimore and Washington Transit.....                     | .....                            | .....         | .....              | .43           |
| Washington, Alexandria and Mount Vernon Electric Rwy..... | .90                              | .33           | .....              | .....         |
| Total.....                                                | 37                               | 9.93          | 28.80              | 2.96          |

TABLE B.—*Statement of character and extent of street pavements July 1, 1901.*

| Section.        | Asphalt and coal tar. | Asphalt block.  | Vitrified block. | Granite.        | Cobble.         | Macadam.        | Gravel and unimproved. | Total.          |
|-----------------|-----------------------|-----------------|------------------|-----------------|-----------------|-----------------|------------------------|-----------------|
|                 | <i>Sq. yds.</i>       | <i>Sq. yds.</i> | <i>Sq. yds.</i>  | <i>Sq. yds.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i>        | <i>Sq. yds.</i> |
| Northwest.....  | 1,850,038             | 30,600          | 13,903           | 168,743         | 115,394         | 82,685          | 132,562                | 2,383,925       |
| Northeast.....  | 225,461               | 148,908         | 0                | 19,111          | 1,738           | 61,510          | 487,732                | 944,490         |
| Southeast.....  | 143,131               | 159,572         | 0                | 56,845          | 31,263          | 119,224         | 448,340                | 958,405         |
| Southwest.....  | 153,218               | 30,594          | 2,943            | 233,973         | 74,723          | 43,234          | 156,982                | 695,607         |
| Georgetown..... | 138,695               | 12,819          | 0                | 60,363          | 25,187          | 14,837          | 39,653                 | 290,954         |
| Suburban.....   | 264,777               | 25,592          | 0                | 32,254          | 0               | 658,945         | 551,633                | 1,533,201       |
| Total.....      | 2,774,720             | 407,995         | 16,846           | 571,289         | 248,335         | 980,465         | 1,816,902              | 6,816,552       |

TABLE C.—Statement showing mileage of street pavements July 1, 1901.

| Section.         | Asphalt and coal tar. |        | Asphalt block. |        | Vitrified block. |        | Granite. |        |
|------------------|-----------------------|--------|----------------|--------|------------------|--------|----------|--------|
|                  | Feet.                 | Miles. | Feet.          | Miles. | Feet.            | Miles. | Feet.    | Miles. |
| Northwest .....  | 405,855               | 77.00  | 8,580          | 1.63   | 2,250            | 0.42   | 43,728   | 8.28   |
| Northeast .....  | 59,951                | 11.30  | 30,543         | 5.78   | 0                | 0      | 4,700    | .89    |
| Southeast .....  | 37,441                | 7.09   | 38,128         | 7.22   | 0                | 0      | 15,406   | 2.92   |
| Southwest .....  | 39,293                | 7.44   | 8,187          | 1.55   | 500              | .10    | 55,716   | 10.55  |
| Georgetown ..... | 38,517                | 7.39   | 3,786          | .72    | 0                | 0      | 17,271   | 3.27   |
| Suburban .....   | 66,398                | 12.39  | 7,733          | 1.46   | 0                | 0      | 9,376    | 1.78   |
| Total .....      | 647,155               | 122.61 | 96,957         | 18.36  | 2,750            | .52    | 146,197  | 27.69  |

| Section.         | Cobble. |        | Macadam. |        | Gravel and unimproved. |        | Total.    |        |
|------------------|---------|--------|----------|--------|------------------------|--------|-----------|--------|
|                  | Feet.   | Miles. | Feet.    | Miles. | Feet.                  | Miles. | Feet.     | Miles. |
| Northwest .....  | 21,909  | 4.00   | 17,625   | 3.33   | 41,280                 | 7.82   | 540,627   | 102.48 |
| Northeast .....  | 750     | .14    | 13,674   | 2.59   | 127,506                | 24.15  | 236,824   | 44.85  |
| Southeast .....  | 10,366  | 1.96   | 31,594   | 6.00   | 112,317                | 21.27  | 245,252   | 46.46  |
| Southwest .....  | 16,294  | 3.09   | 10,370   | 1.96   | 44,414                 | 8.41   | 174,774   | 33.16  |
| Georgetown ..... | 9,631   | 1.82   | 4,420    | .80    | 11,391                 | 2.16   | 85,016    | 16.16  |
| Suburban .....   | 0       | 0      | 164,736  | 31.20  | 160,000                | 30.30  | 408,243   | 77.13  |
| Total .....      | 58,350  | 11.01  | 242,419  | 45.88  | 496,908                | 94.11  | 1,690,736 | 320.18 |

TABLE D.—*Descriptive list of street pavements and suburban*

| Street.                        | From—                       | To—                         | Kind of pavement or roadway. |
|--------------------------------|-----------------------------|-----------------------------|------------------------------|
| A, NE .....                    | First .....                 | Second .....                | Asphalt, H. B. ....          |
| Do .....                       | Second .....                | Fourth .....                | do .....                     |
| Do .....                       | Fourth .....                | Seventh .....               | Coal tar .....               |
| Do .....                       | Seventh .....               | Ninth .....                 | Asphalt block .....          |
| A, SE .....                    | Second .....                | Third .....                 | Asphalt, H. B. ....          |
| Do .....                       | Third .....                 | Sixth .....                 | Asphalt block .....          |
| Do .....                       | Sixth .....                 | Seventh .....               | do .....                     |
| Do .....                       | Seventh .....               | North Carolina avenue ..... | do .....                     |
| Acker .....                    | E and F, NE .....           | Sixth and Seventh .....     | do .....                     |
| Adams .....                    | Harrison .....              | Jefferson .....             | Gravel .....                 |
| Albemarle .....                | Grant road .....            | Thirty-eighth .....         | Macadam .....                |
| Do .....                       | Thirty-eighth .....         | Connecticut avenue .....    | Gravel .....                 |
| Anacostia road .....           | Pennsylvania avenue .....   | District line .....         | do .....                     |
| Arthur place .....             | First, NW .....             | New Jersey avenue .....     | Asphalt block .....          |
| Arthur street, Anacostia ..... | (Valley) Grant .....        | High .....                  | Gravel .....                 |
| Avon .....                     | Cambridge .....             | V .....                     | Asphalt, H. B. ....          |
| B, NW .....                    | Delaware avenue .....       | First .....                 | Asphalt block .....          |
| Do .....                       | First .....                 | Third .....                 | Granite .....                |
| Do .....                       | Sixth .....                 | Seventh .....               | do .....                     |
| B, NW (north side) .....       | Seventh .....               | Ninth .....                 | Vitrified block .....        |
| Do .....                       | Ninth .....                 | Twelfth .....               | do .....                     |
| B, NW .....                    | Seventh .....               | Seventeenth .....           | Cobble and rubble .....      |
| Do .....                       | Intersections Fifth .....   | Eighth and Sixteenth .....  | Asphalt, H. B. ....          |
| B, NE .....                    | Delaware avenue .....       | First .....                 | Coal tar .....               |
| Do .....                       | First .....                 | Second .....                | do .....                     |
| Do .....                       | Second .....                | Fourth .....                | Asphalt, H. B. ....          |
| Do .....                       | Fourth .....                | Sixth .....                 | do .....                     |
| Do .....                       | Sixth .....                 | Massachusetts avenue .....  | Coal tar .....               |
| Do .....                       | Massachusetts avenue .....  | Ninth .....                 | Asphalt, H. B. ....          |
| Do .....                       | Ninth .....                 | Eleventh .....              | Gravel .....                 |
| Do .....                       | Eleventh .....              | Fourteenth .....            | do .....                     |
| B, SE .....                    | New Jersey avenue .....     | Second .....                | Granite .....                |
| Do .....                       | do .....                    | do .....                    | Coal tar .....               |
| Do .....                       | First .....                 | do .....                    | Asphalt, H. B. ....          |
| Do .....                       | Second .....                | Fifth .....                 | do .....                     |
| Do .....                       | Fifth .....                 | North Carolina avenue ..... | Coal tar .....               |
| Do .....                       | North Carolina avenue ..... | Eleventh .....              | Asphalt block .....          |
| Do .....                       | Eleventh .....              | Nineteenth .....            | Macadam .....                |
| B, SW .....                    | First .....                 | New Jersey avenue .....     | Granite .....                |
| Do .....                       | do .....                    | Maryland avenue .....       | do .....                     |
| Do .....                       | Sixth .....                 | Fourteenth .....            | Asphalt, H. B. ....          |
| Bacon, NW .....                | Fourteenth .....            | Fifteenth .....             | Gravel .....                 |
| Baltimore .....                | Columbia road .....         | Nineteenth .....            | Asphalt, H. B. ....          |
| Do .....                       | Nineteenth .....            | Twentieth .....             | Asphalt block .....          |
| Bancroft .....                 | Connecticut avenue .....    | Phelps place .....          | Asphalt, B. B. ....          |
| Bates road .....               | .....                       | .....                       | Gravel .....                 |
| Belmont .....                  | Eighteenth .....            | Columbia road .....         | Asphalt, H. B. ....          |
| Belt road .....                | .....                       | .....                       | .....                        |
| Bennings road .....            | Fifteenth .....             | Eastward .....              | Asphalt, H. B. ....          |
| Do .....                       | do .....                    | do .....                    | Granite .....                |
| Do .....                       | .....                       | To bridge .....             | Macadam .....                |
| Do .....                       | .....                       | District line .....         | Gravel .....                 |
| Binney .....                   | Eastern Branch .....        | Fifteenth .....             | Macadam .....                |
| Bladensburg road .....         | Fourth .....                | .....                       | Macadam .....                |
| Do .....                       | Florida avenue .....        | District line .....         | Asphalt, H. B. ....          |
| Do .....                       | do .....                    | .....                       | Macadam .....                |
| Blair road .....               | Umatilla .....              | do .....                    | Gravel .....                 |
| Blagden's Mill road .....      | .....                       | .....                       | do .....                     |
| Brentwood road .....           | Florida avenue .....        | Patterson .....             | Macadam .....                |
| Do .....                       | do .....                    | District line .....         | Gravel .....                 |
| Brightwood avenue .....        | do .....                    | Pomeroy .....               | Granite .....                |



TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                             | From—                                | To—                            | Kind of pavement<br>or roadway. |
|-------------------------------------|--------------------------------------|--------------------------------|---------------------------------|
| Brightwood avenue ...               | Florida avenue.....                  | Grant .....                    | Granite.....                    |
| Do.....                             | Grant avenue.....                    | Irving.....                    | do.....                         |
| Do.....                             | Irving.....                          | Steuben.....                   | do.....                         |
| Do.....                             | do.....                              | do.....                        | do.....                         |
| Do.....                             | Steuben.....                         | Rock Creek Church road .....   | Macadam.....                    |
| Do.....                             | Rock Creek Church<br>road.....       | District line .....            | do.....                         |
| Branch avenue .....                 | Pennsylvania avenue<br>extended..... | Bowen road .....               | Gravel .....                    |
| Broad Branch road.....              | Howard.....                          | Laurel .....                   | do.....                         |
| Brown street .....                  |                                      |                                | do.....                         |
| Bunker Hill road.....               |                                      |                                | do.....                         |
| C, NW .....                         | Delaware avenue.....                 | First .....                    | Granite.....                    |
| Do.....                             | New Jersey avenue.....               | do.....                        | Asphalt, H. B.....              |
| Do.....                             | Second.....                          | Third .....                    | Granite.....                    |
| Do.....                             | Third.....                           | Four-and-a-half .....          | Asphalt, H. B.....              |
| Do.....                             | Four-and-a-half.....                 | Seventh.....                   | do.....                         |
| Do.....                             | Seventh.....                         | Eighth.....                    | Granite.....                    |
| Do.....                             | Ninth.....                           | Tenth.....                     | Belgian.....                    |
| Do.....                             | Tenth.....                           | Eleventh.....                  | Cobble.....                     |
| Do.....                             | Twelfth.....                         | Fifteenth.....                 | do.....                         |
| Do.....                             | Eleventh.....                        | Twelfth.....                   | Asphalt, H. B.....              |
| C, NE .....                         | Delaware avenue .....                | First .....                    | Granite.....                    |
| Do.....                             | First.....                           | Third .....                    | do.....                         |
| Do.....                             | Fourth.....                          | Sixth.....                     | Asphalt block.....              |
| Do.....                             | Sixth.....                           | Eighth.....                    | do.....                         |
| Do.....                             | Eighth.....                          | Tenth.....                     | do.....                         |
| Do.....                             | Tenth.....                           | Tennessee avenue.....          | Gravel .....                    |
| C, SE .....                         | New Jersey avenue.....               | Fourth.....                    | Asphalt block.....              |
| Do.....                             | Fourth.....                          | Sixth.....                     | do.....                         |
| Do.....                             | Sixth.....                           | Eleventh.....                  | Macadam.....                    |
| Do.....                             | Eleventh.....                        | Twelfth.....                   | Asphalt, H. B.....              |
| C, SW .....                         | New York avenue.....                 | First .....                    | do.....                         |
| Do.....                             | First.....                           | Four-and-a-half .....          | Coal tar .....                  |
| Do.....                             | Four-and-a-half .....                | Sixth.....                     | do.....                         |
| Do.....                             | Sixth.....                           | Seventh.....                   | Granite.....                    |
| Do.....                             | Ninth.....                           | Twelfth.....                   | Asphalt block.....              |
| Do.....                             | Twelfth.....                         | Fourteenth.....                | do.....                         |
| California.....                     | Florida avenue.....                  | Eighteenth.....                | Asphalt, B. B.....              |
| Do.....                             | Eighteenth.....                      | Nineteenth.....                | Asphalt, H. B.....              |
| Do.....                             | Columbia road .....                  | Phelps place .....             | Macadam.....                    |
| Do.....                             | E and F, NE.....                     | First and Second.....          | Asphalt, H. B.....              |
| Canal, east side.....               | B, SW .....                          | C .....                        | Gravel .....                    |
| Canal, west side.....               | do.....                              | do.....                        | Asphalt block.....              |
| Canal .....                         | C, SW .....                          | E .....                        | Granite.....                    |
| Canal road .....                    | Thirty-seventh.....                  | Chain Bridge.....              | Macadam.....                    |
| Cambridge .....                     | Q and U.....                         | Thirtieth and Avon.....        | Asphalt, H. B.....              |
| Carroll .....                       | B and C, SE.....                     | First and Second.....          | do.....                         |
| Carroll avenue, Takoma<br>Park..... |                                      |                                | Gravel.....                     |
| Caroline .....                      | T and V.....                         | Fifteenth and Sixteenth.....   | Asphalt, B. B.....              |
| Cathedral avenue.....               |                                      |                                | Macadam.....                    |
| Cedar .....                         | S and T .....                        | Eighteenth and Nineteenth..... | Asphalt, H. B.....              |
| Central .....                       |                                      |                                | Gravel .....                    |
| Chapel road .....                   |                                      |                                | do.....                         |
| Chapin.....                         | Fourteenth.....                      | Alley west of Fourteenth.....  | Asphalt block.....              |
| Do.....                             | Alley.....                           | Westward .....                 | Granite.....                    |
| Do.....                             |                                      | Fifteenth.....                 | Asphalt, B. B.....              |
| Chain Bridge road.....              |                                      |                                | Gravel .....                    |
| Chestnut (Anacostia).....           | Maple.....                           | Arthur .....                   | do.....                         |
| Chestnut (Takoma<br>Park).....      |                                      |                                | do.....                         |
| Champlain avenue.....               | Florida avenue.....                  | Columbia road .....            | Macadam.....                    |



with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.                |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|-------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                         |
| 1891       | 5,222         |                        | \$6,281.00     |             |                       |                                              |                    |               |                         |
| 1889       | 6,295         |                        | 10,539.00      |             |                       |                                              |                    |               |                         |
| 1891       | 3,365         |                        |                |             |                       |                                              |                    |               |                         |
| 1896       | 2,377         |                        | 3,145.00       |             |                       |                                              |                    |               |                         |
|            | 12,000        |                        |                |             |                       |                                              |                    |               |                         |
|            | 86,000        |                        |                |             |                       |                                              |                    |               |                         |
|            | 7,500         |                        |                |             |                       |                                              |                    |               |                         |
|            | 25,800        |                        |                |             |                       |                                              |                    |               |                         |
|            | 2,000         |                        |                |             |                       |                                              |                    |               |                         |
|            | 17,500        |                        |                |             |                       |                                              |                    |               |                         |
| 1879       |               |                        |                |             |                       |                                              |                    |               |                         |
| 1901       |               |                        |                |             | 0                     | 0                                            | 0                  | 0             |                         |
| 1882       | 1,291         | \$2.38                 | 3,204.00       |             |                       |                                              |                    |               |                         |
| 1882       | 2,054         | 2.20                   | 4,732.00       |             |                       | \$0.074                                      |                    | \$0.048       |                         |
| 1885       | 4,604         | 2.25                   | 15,903.00      |             |                       | .034                                         |                    | .051          |                         |
| 1879       | 1,183         | 1.87                   | 2,140.00       |             |                       |                                              |                    |               |                         |
| 1872       | 1,656         | 3.40                   | 5,632.00       |             |                       |                                              |                    |               |                         |
| 1872       | 6,917         | .70                    | 4,842.00       |             |                       |                                              |                    |               |                         |
| 1872       |               |                        |                |             |                       |                                              |                    |               |                         |
| 1897       | 903           | 1.55                   | 2,023.00       |             | 0                     | 0                                            | 0                  | 0             | In place of cobble.     |
| 1880       | 2,080         | 1.761                  | 3,747.00       |             |                       |                                              |                    |               |                         |
| 1882       | 4,190         | 2.431                  | 10,231.00      |             |                       |                                              |                    |               |                         |
| 1886       | 4,478         | 2.00                   | 12,493.00      |             |                       |                                              |                    |               |                         |
| 1888       | 3,986         | 2.00                   | 9,895.00       |             |                       |                                              |                    |               |                         |
| 1891       | 2,180         | 2.00                   | 7,241.00       |             |                       |                                              |                    |               |                         |
| 1888       |               |                        |                |             |                       |                                              |                    |               |                         |
| 1895       | 4,734         |                        |                |             |                       |                                              |                    |               |                         |
| 1884       | 6,922         | 2.10                   | 17,113.00      |             |                       |                                              |                    |               |                         |
| 1890       | 1,464         | 2.00                   | 3,499.00       |             |                       |                                              |                    |               |                         |
| 1889       | 4,573         | .57                    | 6,314.00       |             |                       |                                              |                    |               |                         |
| 1896       | 1,033         | 1.63                   | 2,922.00       |             | 0                     | 0                                            | 0                  | 0             |                         |
| 1889       | 4,919         | 2.00                   | 14,706.00      |             | 0                     | 0                                            | 0                  | 0             | 4-inch base.            |
| 1887       | 5,941         | 1.99                   | 18,086.00      | 1897        | 0                     | .052                                         | 0                  | 0             | Hydraulic base, 1897.   |
| 1887       | 2,273         | 1.97                   | 7,916.00       | 1897        | \$2.39                | .069                                         | 0                  | 0             | Do.                     |
| 1887       | 1,831         | 2.60                   | 4,755.00       |             |                       |                                              |                    |               |                         |
| 1885       | 3,253         | 2.10                   | 7,680.00       |             |                       |                                              |                    |               |                         |
| 1888       | 3,840         | 2.00                   | 9,115.00       |             |                       |                                              |                    |               |                         |
|            | 875           |                        |                |             | 0                     | 0                                            | 0                  | 0             | Private expense.        |
| 1890       | 2,153         | 2.25                   | 4,473.00       |             | 0                     | 0                                            | 0                  | 0             |                         |
| 1891       | 3,169         | .90                    | 4,185.00       |             |                       |                                              |                    |               |                         |
| 1891       | 1,635         | 2.25                   | 5,599.00       |             | 0                     | 0                                            | 0                  | 0             | Permit work.            |
| 1899       | 3,687         |                        | 1,094.00       |             |                       |                                              |                    |               |                         |
| 1894       | 1,881         | 2.25                   | 4,755.00       |             |                       |                                              |                    |               |                         |
| 1890       | 5,186         |                        | 7,548.00       |             |                       |                                              |                    |               | Hydraulic base.         |
| 1874       | 45,000        |                        |                |             |                       |                                              |                    |               |                         |
| 1893       | 1,247         | 2.00                   | 2,815.00       |             | 0                     | 0                                            | 0                  | 0             |                         |
| 1892       | 1,416         | 2.00                   | 6,223.00       |             | 0                     | 0                                            | 0                  | 0             | 4-inch base.            |
| 1891       | 5,000         |                        |                |             |                       |                                              |                    |               |                         |
| 1891       | 1,325         | 2.00                   | 4,682.00       |             | 0                     | 0                                            | 0                  | 0             |                         |
| 1901       | 8,768         |                        |                |             |                       |                                              |                    |               |                         |
| 1899       | 1,546         | 1.76                   | 3,266.00       |             | 0                     | 0                                            | 0                  | 0             |                         |
|            | 4,860         |                        |                |             |                       |                                              |                    |               |                         |
|            | 4,000         |                        |                |             |                       |                                              |                    |               |                         |
| 1888       | 483           |                        |                |             |                       |                                              |                    |               | Day labor; permit work. |
| 1889       | 674           |                        | 5,663.00       |             |                       |                                              |                    |               |                         |
| 1889       | 1,702         | 2.00                   | 3,472.00       |             | 0                     | 0                                            | 0                  | 0             |                         |
|            | 8,000         |                        |                |             |                       |                                              |                    |               |                         |
|            | 1,500         |                        |                |             |                       |                                              |                    |               |                         |
|            | 2,430         |                        |                |             |                       |                                              |                    |               |                         |
| 1894       | 6,668         |                        |                |             |                       |                                              |                    |               |                         |

TABLE D.—*Descriptive list of street pavements and suburban roadways.*

| Street.                                    | From—                           | To—                                       | Kind of pavement or roadway. |
|--------------------------------------------|---------------------------------|-------------------------------------------|------------------------------|
| Cincinnati .....                           | Eighteenth .....                | Rock Creek .....                          | Asphalt, H. B. ....          |
| Cleveland place .....                      | W and Florida avenue .....      | Twelfth and Thirteenth .....              | Asphalt block .....          |
| Clifton .....                              | Thirteenth .....                | Fourteenth .....                          | Asphalt, B. B. ....          |
| Columbia .....                             | O and Q .....                   | Ninth and Tenth .....                     | Coal tar .....               |
| Do .....                                   | Sherman avenue .....            | Thirteenth .....                          | Asphalt, H. B. ....          |
| Do .....                                   | Thirteenth .....                | Fourteenth .....                          | Asphalt block .....          |
| Columbia road .....                        | Fourteenth .....                | Eighteenth .....                          | Macadam .....                |
| Concord .....                              | Tenth NE .....                  | Thirteenth .....                          | do .....                     |
| Connecticut avenue .....                   | H. ....                         | Florida avenue .....                      | Coal tar .....               |
| Do .....                                   | Intersection of Florida avenue. |                                           | Asphalt, H. B. ....          |
| Connecticut avenue (west side.) .....      | Florida avenue .....            | Leroy place .....                         | do .....                     |
| Connecticut avenue and Columbia road ..... | .....                           | Eighteenth .....                          | do .....                     |
| Connecticut avenue .....                   | California .....                | Kalorama .....                            | Asphalt, B. B. ....          |
| Do .....                                   | North of .....                  | Kalorama .....                            | do .....                     |
| Do .....                                   | Rock Creek .....                | District line .....                       | Macadam .....                |
| Conduit road .....                         | .....                           | .....                                     | do .....                     |
| Corcoran .....                             | Q and R .....                   | Thirteenth and Fourteenth .....           | Coal tar .....               |
| Do .....                                   | do .....                        | Fourteenth and Fifteenth .....            | do .....                     |
| Do .....                                   | do .....                        | Fifteenth and New Hampshire avenue .....  | Asphalt, H. B. ....          |
| Do .....                                   | do .....                        | New Hampshire avenue and Nineteenth ..... | do .....                     |
| Crescent .....                             | Sixteenth .....                 | Westward .....                            | Macadam .....                |
| D, NW .....                                | North Capitol .....             | New Jersey avenue .....                   | Granite .....                |
| Do .....                                   | New Jersey avenue .....         | Fourth .....                              | Coal tar .....               |
| Do .....                                   | Fifth .....                     | Sixth .....                               | Asphalt .....                |
| Do .....                                   | Sixth to Eighth .....           | Ninth to Tenth .....                      | Granite .....                |
| Do .....                                   | Eighth .....                    | Ninth .....                               | Asphalt .....                |
| Do .....                                   | Eleventh .....                  | Twelfth .....                             | Asphalt, H. B. ....          |
| Do .....                                   | Twelfth .....                   | Fourteenth .....                          | Rubble .....                 |
| Do .....                                   | do .....                        | do .....                                  | Cobble .....                 |
| Do .....                                   | Fourteenth .....                | Fifteenth .....                           | Asphalt .....                |
| Do .....                                   | Seventeenth .....               | Eighteenth .....                          | Asphalt, H. B. ....          |
| Do .....                                   | Eighteenth .....                | Twentieth .....                           | Macadam .....                |
| D, NE .....                                | Delaware avenue .....           | Massachusetts avenue .....                | Asphalt, B. B. ....          |
| Do .....                                   | Massachusetts avenue .....      | Maryland avenue .....                     | Asphalt, H. B. ....          |
| Do .....                                   | Seventh .....                   | Ninth .....                               | do .....                     |
| Do .....                                   | Ninth .....                     | Thirteenth .....                          | do .....                     |
| D, SE .....                                | South Capitol .....             | First .....                               | do .....                     |
| Do .....                                   | First .....                     | Third .....                               | Asphalt block .....          |
| Do .....                                   | Third .....                     | Sixth .....                               | do .....                     |
| Do .....                                   | Sixth .....                     | Seventh .....                             | do .....                     |
| Do .....                                   | do .....                        | do .....                                  | do .....                     |
| Do .....                                   | Seventh .....                   | Ninth .....                               | do .....                     |
| Do .....                                   | Ninth .....                     | Kentucky avenue .....                     | Gravel .....                 |
| D, SW .....                                | South Capitol .....             | First .....                               | Asphalt, B. B. ....          |
| Do .....                                   | First .....                     | Third .....                               | Asphalt, H. B. ....          |
| Do .....                                   | Third .....                     | Four-and-a-half .....                     | Coal tar .....               |
| Do .....                                   | Four-and-a-half .....           | Seventh .....                             | Rubble .....                 |
| Do .....                                   | Seventh .....                   | Fourteenth .....                          | Cobble .....                 |
| Daniels road .....                         | .....                           | .....                                     | Gravel .....                 |
| Defrees .....                              | H and I, NW .....               | North Capitol and First .....             | Asphalt block .....          |
| Delaware avenue .....                      | B, N .....                      | C, N .....                                | Granite .....                |
| Do .....                                   | C .....                         | E .....                                   | Gravel .....                 |
| Do .....                                   | B, S .....                      | C, S .....                                | Macadam .....                |
| Do .....                                   | C .....                         | G .....                                   | do .....                     |
| Do .....                                   | G .....                         | K .....                                   | do .....                     |

with repairs to asphalt pavements to July 1, 1901—Continued.

[illegible]

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                     | From—                                  | To—                        | Kind of pavement or roadway. |
|-----------------------------|----------------------------------------|----------------------------|------------------------------|
| Delaware avenue             | K                                      | N                          | Gravel                       |
| Detroit                     | Twenty-fourth                          | B. and O. R. R.            | Macadam                      |
| Duncan place                | D and E, NE                            | Twelfth and Thirteenth     | Vitrified brick              |
| E, NW                       | North Capitol                          | New Jersey avenue          | Asphalt, H. B.               |
| Do.                         | New Jersey avenue                      | Fourth                     | do                           |
| Do.                         | Fifth                                  | Eleventh                   | do                           |
| Do.                         | Eleventh                               | Thirteenth                 | Granite                      |
| Do.                         | Thirteenth                             | Fourteenth                 | Asphalt, H. B.               |
| Do.                         | Pennsylvania avenue                    | Fifteenth                  | Asphalt                      |
| Do.                         | Seventeenth                            | Nineteenth                 | Cobble.                      |
| Do.                         | Eighteenth                             | do                         | Coal tar                     |
| Do.                         | Nineteenth                             | Virginia avenue            | Cobble.                      |
| E, NE                       | North Capitol                          | First                      | Granite                      |
| Do.                         | First                                  | Fourth                     | Asphalt block                |
| Do.                         | Fourth                                 | Maryland avenue            | Gravel                       |
| E, SE                       | South Capitol                          | Third                      | Asphalt block                |
| Do.                         | Third                                  | Fourth                     | do                           |
| Do.                         | Fourth to Ninth and Tenth to Eleventh. |                            | Macadam                      |
| Do.                         | Ninth                                  | Tenth                      | Asphalt, H. B.               |
| Do.                         | Eleventh                               | Thirteenth                 | do                           |
| Do.                         | Intersection of Thirteenth.            |                            | do                           |
| Do.                         | Thirteenth eastward.                   |                            | do                           |
| Do.                         | Extended to Fifteenth.                 |                            | do                           |
| Do.                         | Fifteenth                              | Seventeenth                | Gravel                       |
| E, SW                       | South Capitol                          | First                      | Asphalt, B. B.               |
| Do.                         | Virginia avenue                        | Third                      | Asphalt, H. B.               |
| Do.                         | Third                                  | Four-and-a-half            | Coal tar                     |
| Do.                         | Four-and-a-half                        | Seventh                    | Asphalt, H. B.               |
| Do.                         | Seventh                                | Thirteenth                 | do                           |
| East Capitol                | First                                  | Ninth                      | do                           |
| Do.                         | Fourth                                 | Eleventh                   | do                           |
| East Capitol, north side    | Eleventh                               | Thirteenth                 | Asphalt                      |
| East Capitol, south side    | do                                     | do                         | Asphalt, H. B.               |
| Eckington place             | A                                      | R                          | do                           |
| Emerson place               | E and F, NE                            | Thirteenth and Fourteenth. | Asphalt, B. B.               |
| Emporia                     | Twelfth                                | Brentwood road             | Gravel                       |
| Euclid place                | Fourteenth                             | University place           | Asphalt, B. B.               |
| Executive avenue, west      | of Treasury                            |                            | Asphalt, H. B.               |
| F, NW                       | North Capitol                          | New Jersey avenue          | Coal tar                     |
| Do.                         | First                                  | Fourth                     | Asphalt, H. B.               |
| F, NW, south side           | Fifth                                  | Seventh                    | Coal tar                     |
| F, NW, north side           | do                                     | do                         | Asphalt, H. B.               |
| F, NW                       | Seventh                                | Ninth                      | Asphalt, B. B.               |
| F, NW. (north of railroad). | do                                     | do                         | Granite.                     |
| F, NW                       | Ninth                                  | Twelfth                    | Coal tar                     |
| Do.                         | Twelfth                                | Thirteenth                 | do                           |
| Do.                         | Thirteenth                             | Fifteenth                  | Asphalt, B. B.               |
| Do.                         | Seventeenth                            | Eighteenth                 | Asphalt, H. B.               |
| Do.                         | Eighteenth                             | Twenty-second              | Coal tar                     |
| Do.                         | Twenty-second                          | Twenty-third               | Asphalt, H. B.               |
| Do.                         | Virginia avenue                        | Twenty-fifth               | Vitrified block              |
| Do.                         | Twenty-fifth                           | New Hampshire avenue       | Granite                      |
| F, NE                       | North Capitol                          | Third                      | Asphalt, B. B.               |
| Do.                         | Third                                  | Eastward                   | Asphalt, H. B.               |
| Do.                         | Extension to Ninth.                    |                            | do                           |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                     |               | Remarks.                                |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|---------------------|---------------|-----------------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to re-surfacing.                       | Since re-surfacing. | Current year. |                                         |
| 1890       | 6,000         |                        |                |             |                       |                                              |                     |               |                                         |
| 1891       | 675           |                        |                |             |                       |                                              |                     |               |                                         |
| 1892       | 1,369         |                        |                |             |                       |                                              |                     |               |                                         |
| 1893       | 2,494         | \$1.98                 | \$6,900.00     |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1879       | 4,932         | 1.47                   | 7,367.00       |             | 0                     | \$0.039                                      | 0                   | 0             |                                         |
| 1878       | 9,323         | 1.75                   | 16,335.00      | 1891        | \$1.38                | .096                                         | \$0.018             | \$0.002       |                                         |
| 1879       | 2,487         | 2.00                   | 5,386.00       |             |                       |                                              |                     |               |                                         |
| 1900       | 1,063         |                        | 2,936.00       |             |                       |                                              |                     |               |                                         |
| 1889       | 3,631         | 1.20                   | 5,294.00       |             | 0                     | 0                                            | 0                   | .013          | In place of asphalt block. Cobble base. |
| 1873       | 4,637         | .70                    | 3,247.00       |             |                       |                                              |                     |               |                                         |
| 1873       | 1,642         | 3.20                   | 5,244.00       | 1878        | 1.44                  |                                              | .022                | 0             | North side Rawlins square.              |
| 1872       | 4,831         | .55                    | 2,657.00       |             |                       |                                              |                     |               |                                         |
| 1893       | 2,913         |                        | 10,246.00      |             |                       |                                              |                     |               |                                         |
| 1893       | 5,640         | 2.00                   | 16,004.00      |             |                       |                                              |                     |               |                                         |
|            | 6,000         |                        |                |             |                       |                                              |                     |               |                                         |
| 1896       | 5,693         | 1.84                   | 13,966.00      |             |                       |                                              |                     |               |                                         |
| 1899       | 891           | 1.77                   | 2,563.00       |             |                       |                                              |                     |               |                                         |
| 1885       | 7,492         |                        | 11,987.00      |             |                       |                                              |                     |               |                                         |
| 1901       | 1,118         | 1.79½                  | 2,850.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1893       | 3,840         | 2.00                   | 9,839.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1894       | 671           | 1.90                   | 1,650.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1897       | 2,363         | 1.63                   | 4,704.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1898       | 3,607         | 1.57                   | 9,453.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1893       | 3,000         |                        |                |             |                       |                                              |                     |               |                                         |
| 1890       | 3,104         | 2.00                   | 7,059.00       |             | 0                     | 0                                            | 0                   | .0009         |                                         |
| 1897       | 1,580         |                        | 3,768.00       |             |                       |                                              |                     |               |                                         |
| 1896       | 2,371         | 1.97                   | 5,785.00       |             | 0                     | .043                                         |                     | .034          | In place of bitumen base.               |
| 1890       | 4,286         | 1.85                   | 9,672.00       |             | 0                     | .0088                                        |                     | 0             |                                         |
| 1892       | 6,867         | 2.25                   | 19,367.00      |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1879       | 10,511        | 2.04½                  | 21,822.00      | 1889        | 1.37                  | .082                                         | .012                | .036          |                                         |
| 1883       | 6,980         | 2.25                   | 16,462.00      |             | 0                     | .019                                         |                     | .054          |                                         |
| 1894       | 4,076         | 1.77                   | 7,186.00       |             | 0                     | 0                                            | 0                   | 0             | Macadam base.                           |
| 1899       | 3,738         | 1.75                   | 7,676.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1891       | 1,560         | 2.25                   | 4,472.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1892       | 1,949         | 2.00                   | 4,594.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1898       | 6,000         |                        |                |             |                       |                                              |                     |               |                                         |
| 1891       | 1,666         | 2.00                   | 3,860.00       |             | 0                     | 0                                            | 0                   | 0             |                                         |
| 1894       | 5,601         |                        |                |             |                       | .054                                         |                     | .002          |                                         |
| 1887       | 2,962         | 1.98                   | 8,743.00       | 1900        |                       | .054                                         | .071                | 0             |                                         |
| 1879       | 4,382         | 1.47                   | 6,454.00       | 1892        | .675                  | .024                                         |                     | .005          |                                         |
| 1877       | 2,731         | 3.25                   | 8,875.00       |             |                       | .022                                         |                     | .011          |                                         |
| 1878       | 2,359         | 1.78                   | 4,190.00       | 1889        | .93                   | .035                                         | .031                | 0             |                                         |
| 1877       | 1,913         | 3.25                   | 6,217.00       | 1891        | 1.61                  | .062                                         | .02                 | 0             |                                         |
| 1879       | 527           | 1.93                   | 1,017.26       |             |                       |                                              |                     |               |                                         |
| 1877       | 4,257         | 2.69                   | 11,151.00      | 1890        | 1.76                  | .05                                          | .01                 | .0005         |                                         |
| 1877       | 2,103         | 1.74                   | 3,660.00       | 1882        | 1.07                  |                                              | .011                | 0             |                                         |
| 1873       | 6,467         | 3.20                   | 20,694.00      | 1891        | 1.20                  |                                              | .04                 | 0             |                                         |
| 1881       | 2,856         | 1.85                   | 5,372.00       | 1882        | .753                  | .008                                         |                     | .001          |                                         |
| 1873       | 8,790         | 3.20                   | 28,128.00      | 1891        | .714                  | .033                                         | .08                 | .02           |                                         |
| 1894       | 2,360         | 2.18½                  | 4,899.00       | 1878        | 1.34                  | .014                                         | .008                | 0             |                                         |
| 1894       | 2,964         |                        |                | 1897        | 1.73                  |                                              | .028                | 0             |                                         |
| 1894       | 1,711         |                        | 13,316.00      | 1900        | .96                   |                                              |                     | 0             |                                         |
| 1888       | 8,339         | 2.00                   | 19,797.00      |             | 0                     | 0                                            | 0                   | 0             | Hydraulic base.                         |
| 1897       | 1,308         | 1.63                   | 2,724.00       | 1901        |                       | .044                                         |                     | 0             |                                         |
| 1898       | 8,057         | 1.57                   | 19,587.00      |             | 0                     | 0                                            | 0                   | 0             |                                         |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                        | From—                                            | To—                               | Kind of pavement or roadway. |
|--------------------------------|--------------------------------------------------|-----------------------------------|------------------------------|
| F, NE .....                    | Ninth .....                                      | Maryland avenue .....             | Asphalt, H. B. ....          |
| Do. ....                       | Thirteenth .....                                 | Fourteenth .....                  | Macadam .....                |
| F, SE .....                    | First .....                                      | Second .....                      | Asphalt block .....          |
| F, SW .....                    | do .....                                         | Four-and-a-half .....             | Granite .....                |
| Do. ....                       | Four-and-a half .....                            | Seventh .....                     | Asphalt, B. B. ....          |
| Do. ....                       | Seventh .....                                    | Tenth .....                       | Asphalt block .....          |
| Fenton place .....             | K and L .....                                    | North Capitol and First .....     | Gravel .....                 |
| Fillmore .....                 | Harrison .....                                   | Jefferson .....                   | do .....                     |
| Flagler place .....            | V .....                                          | Albany .....                      | Asphalt block .....          |
| Flint .....                    | Brightwood avenue .....                          | Fifth .....                       | Macadam .....                |
| Florida avenue .....           | North Capitol .....                              | First, W .....                    | Asphalt, H. B. ....          |
| Do. ....                       | First .....                                      | Fourth .....                      | Macadam .....                |
| Do. ....                       | Fourth .....                                     | New Jersey avenue .....           | Asphalt, B. B. ....          |
| Do. ....                       | New Jersey avenue .....                          | Seventh .....                     | do .....                     |
| Do. ....                       | Seventh .....                                    | Ninth .....                       | Granite .....                |
| Do. ....                       | Ninth .....                                      | Sixteenth .....                   | Macadam .....                |
| Do. ....                       | Sixteenth .....                                  | Champlain avenue .....            | do .....                     |
| Do. ....                       | Champlain avenue .....                           | Eighteenth .....                  | do .....                     |
| Florida avenue (n. side) ..... | Eighteenth .....                                 | Connecticut avenue .....          | Asphalt, H. B. ....          |
| Florida avenue (s. side) ..... | do .....                                         | do .....                          | do .....                     |
| Florida avenue .....           | Intersection S and .....                         | Connecticut avenue .....          | do .....                     |
| Do. ....                       | R .....                                          | S .....                           | Macadam .....                |
| Do. ....                       | Q .....                                          | R .....                           | Asphalt, H. B. ....          |
| Florida avenue NE .....        | North Capitol .....                              | New York avenue .....             | do .....                     |
| Do. ....                       | New York avenue .....                            | Brentwood road .....              | Macadam .....                |
| Do. ....                       | Brentwood road .....                             | M .....                           | do .....                     |
| Do. ....                       | M .....                                          | Ninth .....                       | do .....                     |
| Do. ....                       | Ninth .....                                      | Fifteenth .....                   | do .....                     |
| Foxhall road .....             | do .....                                         | do .....                          | do .....                     |
| Frankfort .....                | Twenty-second .....                              | Queen's Chapel road .....         | do .....                     |
| Do. ....                       | Tennallytown road .....                          | Westward .....                    | Asphalt .....                |
| Franklin .....                 | do .....                                         | do .....                          | Gravel .....                 |
| French .....                   | R and S .....                                    | Ninth and Tenth .....             | Asphalt, B. B. ....          |
| G, NW .....                    | North Capitol .....                              | New Jersey avenue .....           | Coal tar .....               |
| Do. ....                       | New Jersey avenue to F .....                     | Fourth and Fifth to Seventh ..... | do .....                     |
| Do. ....                       | Fourth .....                                     | Fifth .....                       | Asphalt, H. B. ....          |
| Do. ....                       | Fifth .....                                      | Seventh .....                     | do .....                     |
| Do. ....                       | Seventh .....                                    | Ninth .....                       | Coal tar .....               |
| Do. ....                       | Ninth .....                                      | Fifteenth .....                   | do .....                     |
| Do. ....                       | Tenth .....                                      | Fourteenth .....                  | Asphalt, H. B. ....          |
| Do. ....                       | Ninth to Tenth and Fourteenth to Fifteenth ..... | do .....                          | do .....                     |
| Do. ....                       | Seventeenth .....                                | Twenty-second .....               | Coal tar .....               |
| Do. ....                       | Twenty-second .....                              | Twenty-seventh .....              | Belgian .....                |
| G, NE .....                    | North Capitol .....                              | First .....                       | Asphalt, B. B. ....          |
| Do. ....                       | First .....                                      | Second .....                      | Gravel .....                 |
| Do. ....                       | Second .....                                     | Sixth .....                       | do .....                     |
| Do. ....                       | Sixth .....                                      | Seventh .....                     | Macadam .....                |
| Do. ....                       | Maryland avenue .....                            | Fourteenth .....                  | Asphalt, H. B. ....          |
| G, SE .....                    | Third .....                                      | Eleventh .....                    | Granite .....                |
| Do. ....                       | Eleventh .....                                   | Pennsylvania avenue .....         | Asphalt block .....          |
| Do. ....                       | Thirteenth .....                                 | Seventeenth .....                 | Macadam .....                |
| G, SW .....                    | South Capitol .....                              | Third .....                       | Granite .....                |
| Do. ....                       | Third .....                                      | Four-and-a-half .....             | Asphalt, H. B. ....          |
| Do. ....                       | Four-and-a-half .....                            | Eighth .....                      | Coal tar .....               |
| Do. ....                       | Eighth .....                                     | Water .....                       | do .....                     |
| Good Hope road .....           | do .....                                         | do .....                          | Macadam .....                |
| Grace .....                    | Thirty-second .....                              | Thirty-third .....                | Cobble .....                 |
| Grant avenue .....             | Brightwood avenue .....                          | Florida avenue .....              | Macadam .....                |
| Grant .....                    | Sixteenth .....                                  | Eighteenth .....                  | do .....                     |
| Grant place .....              | G and H, NW .....                                | Ninth and Tenth .....             | Asphalt, H. B. ....          |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.                        |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|---------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                                 |
| 1900       | 3,024         | \$1.80                 | \$8,677.00     | -----       | 0                     | 0                                            | 0                  | 0             | Permit.                         |
| -----      | 3,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1900       | 2,466         | 1.77                   | 4,072.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1882       | 6,779         | 2.42                   | 20,496.00      | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1874       | 4,315         | 3.20                   | 13,808.00      | 1880        | \$1.11                | -----                                        | \$0.019            | \$0.048       |                                 |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1896       | 3,973         | 1.77                   | 8,689.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | 2,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | 4,700         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1901       | 3,270         | 1.77                   | 7,619.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1900       | 8,416         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | 4-inch base.                    |
| 1896       | 5,840         | 1.63                   | 13,403.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| 1891       | 5,080         | .994                   | 8,826.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1890       | 3,154         | 2.00                   | 9,042.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| 1888       | 7,208         | 2.00                   | 18,132.00      | -----       | -----                 | \$0.022                                      | -----              | .0528         |                                 |
| 1875       | 2,304         | 3.50                   | 8,063.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1875       | 20,436        | 1.50                   | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1876       | 6,032         | 1.50                   | 9,048.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1875       | 4,500         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1895       | 2,435         | 1.94                   | 4,911.00       | -----       | 0                     | 0                                            | 0                  | 0             | In place of coal tar. Widening. |
| 1897       | 2,645         | 1.63                   | 5,305.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1895       | 1,906         | 1.94                   | 4,713.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| 1896       | 3,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1895       | 2,402         | 1.94                   | 6,767.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| 1899       | 6,428         | 1.76                   | 15,184.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| 1895       | 3,042         | .574                   | 2,288.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1897       | 8,793         | .86                    | 9,793.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1896       | 6,314         | .774                   | 6,788.00       | -----       | -----                 | -----                                        | -----              | -----         | Do.                             |
| 1892       | 13,109        | .994                   | 24,790.00      | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | 5,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | 2,360         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | 5,000         | -----                  | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| -----      | 2,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1889       | 1,692         | 2.00                   | 4,218.00       | -----       | 0                     | .004                                         | -----              | 0             |                                 |
| 1887       | 3,802         | 1.98                   | 10,809.00      | -----       | 0                     | .034                                         | -----              | .06           |                                 |
| 1872       | 9,179         | 3.20                   | 29,373.00      | 1879        | .75                   | -----                                        | .042               | -----         |                                 |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1894       | 1,394         | 2.18                   | 3,893.00       | -----       | -----                 | -----                                        | -----              | -----         | Do.                             |
| 1901       | 1,281         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1872       | 2,514         | 3.20                   | 8,045.00       | 1884        | 1.56                  | .014                                         | .047               | .0015         |                                 |
| -----      | -----         | -----                  | -----          | 1878        | .60                   | .017                                         | -----              | -----         |                                 |
| 1872       | 12,583        | 3.20                   | 40,267.00      | 1886        | .315                  | -----                                        | -----              | -----         |                                 |
| -----      | -----         | -----                  | -----          | 1889        | -----                 | -----                                        | -----              | -----         |                                 |
| 1895       | 1,565         | 2.19                   | 3,715.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1900       | 1,147         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1872       | 10,275        | 3.20                   | 32,882.00      | 1878        | 1.40                  | -----                                        | .026               | -----         | In place of coal tar.           |
| -----      | -----         | -----                  | -----          | 1882        | -----                 | -----                                        | .039               | -----         |                                 |
| 1873       | 9,511         | 3.50                   | 33,288.00      | 1892        | -----                 | -----                                        | .014               | .004          |                                 |
| 1890       | 2,308         | 2.00                   | 7,420.00       | 1899        | -----                 | -----                                        | -----              | -----         |                                 |
| 1887       | 3,077         | -----                  | -----          | -----       | -----                 | .017                                         | -----              | .004          |                                 |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1888       | 6,234         | .23                    | 2,966.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1891       | 1,768         | .96                    | 3,212.00       | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1897       | 552           | 1.63                   | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1894       | 5,300         | -----                  | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| 1891       | 1,730         | 2.00                   | 8,085.00       | -----       | -----                 | -----                                        | -----              | -----         | Neuchatel.                      |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1893       | 3,737         | 1.05                   | 11,399.00      | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1891       | 6,517         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1898       | 2,476         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1874       | 5,933         | 3.20                   | 5,545.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                 |
| 1875       | 5,050         | 3.00                   | 18,986.00      | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | -----         | -----                  | -----          | 1881        | 1.46                  | -----                                        | .02                | 0             |                                 |
| -----      | 10,000        | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | 1,400         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | 4,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| -----      | 3,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                 |
| 1875       | 1,435         | 4.25                   | 6,097.00       | -----       | -----                 | .036                                         | -----              | .057          |                                 |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.             | From—                                                       | To—                         | Kind of pavement or roadway. |
|---------------------|-------------------------------------------------------------|-----------------------------|------------------------------|
| Grant road          |                                                             |                             | Gravel.                      |
| Grant (Pleasant)    | Nichols avenue                                              | Fillmore                    | do.                          |
| H, NW               | North Capitol                                               | First                       | Asphalt, H. B.               |
| Do.                 | First                                                       | Fourth                      | Granite                      |
| Do.                 | Fourth                                                      | Seventh                     | Coal tar                     |
| Do.                 | Seventh                                                     | Thirteenth                  | do.                          |
| Do.                 | Thirteenth                                                  | Fourteenth                  | do.                          |
| Do.                 | Fourteenth                                                  | Fifteenth                   | Asphalt, H. B.               |
| Do.                 | Fifteenth                                                   | Vermont avenue              | do.                          |
| Do.                 | Vermont avenue                                              | Connecticut avenue          | Asphalt                      |
| Do.                 | Connecticut avenue                                          | Pennsylvania avenue         | Asphalt, H. B.               |
| Do.                 | Pennsylvania avenue                                         | Twenty-second               | Coal tar                     |
| Do.                 | Twenty-second                                               | Twenty-third                | Asphalt, H. B.               |
| Do.                 | Twenty-third                                                | Twenty-fifth                | Cobble.                      |
| H, NE.              | North Capitol                                               | First                       | Asphalt, H. B.               |
| H, NE. (north side) | First                                                       | Fifteenth                   | do.                          |
| H, NE. (south side) | do.                                                         | do.                         | Asphalt, B. B.               |
| H, SW               | One-half                                                    | First                       | Macadam                      |
| H, SE               | First                                                       | Second                      | Gravel                       |
| H, SW               | do.                                                         | Third                       | Asphalt, B. B.               |
| Do.                 | Third                                                       | Four-and-a-half             | Asphalt, H. B.               |
| Do.                 | Four-and-a-half                                             | Seventh                     | do.                          |
| Do.                 | Seventh                                                     | Ninth                       | do.                          |
| Do.                 | Ninth                                                       | Water                       | Granite                      |
| Harewood road.      |                                                             |                             | Gravel                       |
| Harrison            | Navy-yard bridge eastward.<br>Extended to Minnesota avenue. |                             | (Vitrified block.            |
| Do.                 |                                                             |                             | Asphalt, H. B.               |
| Do.                 |                                                             |                             | do.                          |
| Hartford            | Tenth                                                       | Thirteenth                  | Gravel                       |
| Harvard             | Brightwood avenue                                           | do.                         | do.                          |
| Do.                 | Thirteenth                                                  | Fourteenth                  | Asphalt block.               |
| High                | Maple                                                       | Arthur                      | Gravel                       |
| Heckman, SE         | First and Second                                            | E and F                     | Asphalt block.               |
| Hillyer             | Q and R                                                     | Twentieth and Twenty-first. | do.                          |
| Holmead             | Whitney avenue                                              | Spring road                 | Gravel                       |
| Hopkins             | O and P                                                     | Twentieth and Twenty-first. | Asphalt                      |
| Howard              | Brightwood avenue                                           | Sixth                       | Macadam                      |
| Do.                 | Fourteenth                                                  | Seventeenth                 | do.                          |
| Do.                 | Eighteenth                                                  | 500 feet west               | do.                          |
| I, NW               | North Capitol                                               | New Jersey avenue           | Coal tar                     |
| Do.                 | Second                                                      | Fifth                       | Asphalt, H. B.               |
| Do.                 | Fifth                                                       | Eighth                      | do.                          |
| Do.                 | Eighth                                                      | Ninth                       | do.                          |
| Do.                 | Ninth                                                       | Tenth                       | do.                          |
| Do.                 | Tenth                                                       | Eleventh                    | do.                          |
| Do.                 | Eleventh                                                    | Thirteenth                  | Coal tar                     |
| Do.                 | Thirteenth                                                  | Fifteenth                   | Asphalt, H. B.               |
| Do.                 | Fifteenth                                                   | Seventeenth                 | Coal tar                     |
| Do.                 | Seventeenth                                                 | Eighteenth                  | Asphalt, H. B.               |
| Do.                 | Eighteenth                                                  | Pennsylvania avenue         | do.                          |
| Do.                 | Pennsylvania avenue                                         | Twenty-third                | Asphalt                      |
| Do.                 | Twenty-third                                                | New Hampshire avenue        | Asphalt, H. B.               |
| Do.                 | New Hampshire avenue.                                       | Twenty-sixth.               | do.                          |
| I, NE               | North Capitol                                               | First                       | Asphalt, B. B.               |
| Do.                 | Sixth                                                       | Seventh                     | Macadam                      |
| Do.                 | Seventh                                                     | Florida avenue              | Gravel                       |
| I, SE               | South Capitol                                               | New Jersey Avenue           | Granite                      |
| Do.                 | Second                                                      | Third                       | Macadam                      |
| Do.                 | Third                                                       | Eighth                      | do.                          |
| Do.                 | Third                                                       | Eleventh                    | Asphalt, H. B.               |



with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.                                |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|-----------------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                                         |
| 1870       | 13,700        |                        |                |             |                       |                                              |                    |               | In place of granite.                    |
| 1871       | 1,250         |                        |                |             |                       |                                              |                    |               |                                         |
| 1875       | 3,465         | \$2.19                 | \$9,926.00     |             | 0                     | 0                                            | 0                  | 0             |                                         |
| 1879       | 4,872         | 1.87                   | 9,403.00       |             |                       |                                              |                    |               |                                         |
| 1887       | 6,381         | 1.97                   | 19,044.00      | 1900        | \$1.65                | \$0.046                                      |                    | 0             | In place of coal tar. On asphalt block. |
| 1872       | 9,067         | 3.20                   | 29,014.00      | { 1880      | .473                  | .012                                         |                    |               |                                         |
| 1872       | 2,144         | 3.20                   | 6,861.00       | { 1885      | .635                  | \$0.051                                      | \$0.013            |               |                                         |
| 1884       | 1,735         | 2.25                   | 5,982.00       | 1886        | 1.81                  | .022                                         | .04                | .057          |                                         |
| 1896       | 2,422         | 2.18                   | 6,365.00       |             | 0                     | .035                                         | 0                  | .064          |                                         |
| 1887       | 2,604         | 1.05                   | 2,736.00       |             |                       | 0                                            | 0                  | 0             |                                         |
| 1884       | 5,451         | 2.25                   | 18,608.00      |             |                       | .019                                         |                    | .014          |                                         |
| 1872       | 6,433         | 3.20                   | 20,778.00      | 1901        | .817                  | .051                                         |                    | .021          |                                         |
| 1898       | 1,442         | 1.54                   | 4,104.00       | 1880        | 1.262                 | .014                                         | .019               | .003          |                                         |
| 1875       | 2,708         | .70                    | 1,896.00       |             | 0                     | 0                                            | 0                  | 0             |                                         |
| 1883       | 4,190         | 2.26                   | 9,697.00       | 1891        | 1.07                  | .013                                         | .088               | .06           |                                         |
| 1883       | 14,124        | 2.30                   | 31,551.00      | { 1891      |                       |                                              |                    |               |                                         |
| 1890       | 12,591        | 2.00                   | 32,590.00      | { 1892      | 1.21                  | .059                                         | .039               | .01           |                                         |
| 1901       | 1,611         |                        | 1,984.00       | { 1893      |                       | .019                                         |                    | .023          |                                         |
| 1888       | 1,848         |                        | 1,281.00       |             |                       |                                              |                    |               |                                         |
| 1889       | 4,111         | 2.00                   | 12,255.00      |             |                       | .019                                         |                    | .108          |                                         |
| 1899       | 2,407         | 1.99                   |                |             | 0                     | 0                                            | 0                  | 0             | Permit work.                            |
| 1881       | 4,327         | 1.85                   | 10,128.00      |             |                       | .017                                         |                    | .003          |                                         |
| 1883       | 2,138         | 2.23                   | 6,126.00       |             |                       | .033                                         |                    | .116          |                                         |
| 1883       | 1,581         | .67                    | 5,105.00       |             |                       |                                              |                    |               |                                         |
| 1883       | 12,000        |                        | 12,000.00      |             |                       |                                              |                    |               |                                         |
| 1899       | 1,099         |                        | 9,462.00       | {           | 0                     | 0                                            | 0                  | 0             |                                         |
| 1899       | 2,793         | 1.76                   |                |             | 0                     | 0                                            | 0                  | 0             |                                         |
| 1900       | 2,091         | 1.80                   | 4,579.00       |             |                       |                                              |                    |               |                                         |
| 1900       | 3,700         |                        |                |             |                       |                                              |                    |               |                                         |
| 1898       | 6,113         |                        |                |             |                       |                                              |                    |               |                                         |
| 1900       | 2,377         | 1.77                   | 4,637.00       |             |                       |                                              |                    |               |                                         |
| 1900       | 2,000         |                        |                |             |                       |                                              |                    |               |                                         |
| 1884       | 1,791         | 1.77                   | 3,933.00       |             |                       |                                              |                    |               |                                         |
| 1884       | 1,552         |                        |                |             |                       |                                              |                    |               |                                         |
|            | 6,500         |                        |                |             |                       |                                              |                    |               | Macadam base.                           |
| 1892       | 749           | 2.00                   | 3,084.00       |             | 0                     | 0                                            | 0                  | 0             |                                         |
| 1891       | 952           | .90                    | 1,175.00       |             |                       |                                              |                    |               |                                         |
|            | 7,200         |                        |                |             |                       |                                              |                    |               |                                         |
| 1875       | 1,560         |                        |                |             |                       |                                              |                    |               |                                         |
| 1875       | 4,577         | 3.00                   | 13,671.00      | 1889        | 1.03                  | .032                                         | .003               | 0             |                                         |
| 1884       | 5,804         | 2.25                   | 17,694.00      |             |                       | .049                                         |                    | .065          |                                         |
| 1880       | 4,210         | 1.47                   | 6,352.00       |             |                       | .027                                         |                    | .013          |                                         |
| 1885       | 755           | 2.25                   | 2,413.00       |             |                       | .001                                         |                    | .01           |                                         |
| 1875       | 2,080         | 1.47                   | 4,970.00       |             |                       | .01                                          |                    | .015          |                                         |
| 1886       | 714           | 2.25                   | 2,285.00       |             |                       | .014                                         |                    | .008          |                                         |
| 1872       | 3,700         | 3.20                   | 11,839.00      | 1878        | .995                  | .015                                         |                    | 0             |                                         |
| 1895       | 4,632         |                        |                | { 1895      | 1.96                  | .03                                          | 0                  | 0             |                                         |
| 1873       | 8,322         | 3.20                   | 26,630.00      | { 1878      | .883                  |                                              | .022               | 0             |                                         |
| 1880       | 2,672         | 1.85                   | 7,431.00       | 1894        | 1.59                  | .014                                         |                    | .002          |                                         |
| 1886       | 5,327         | 2.25                   | 13,331.00      |             |                       | .02                                          |                    | .059          |                                         |
| 1891       | 6,644         | 1.20                   | 17,192.00      |             | 0                     | 0                                            | 0                  | 0             | Macadam base.                           |
| 1897       | 2,249         | 1.63                   | 5,125.00       |             | 0                     | 0                                            | 0                  | 0             |                                         |
| 1898       | 3,136         | 1.54                   | 7,084.00       |             | 0                     | 0                                            | 0                  | 0             |                                         |
| 1889       | 3,294         | 2.00                   | 8,809.00       |             | 0                     | 0                                            | 0                  | .003          |                                         |
|            | 2,200         |                        |                |             |                       |                                              |                    |               |                                         |
|            | 7,000         |                        |                |             |                       |                                              |                    |               |                                         |
| 1900       | 3,867         |                        | 4,038.00       |             |                       |                                              |                    |               |                                         |
| 1892       | 1,262         | .95                    | 2,204.00       |             |                       |                                              |                    |               |                                         |
| 1891       | 4,249         | .93                    | 6,796.00       |             |                       |                                              |                    |               |                                         |
| 1896       | 3,214         | 1.63                   | 9,352.00       |             | 0                     | 0                                            | 0                  | 0             |                                         |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                        | From—                                                        | To—                        | Kind of pavement or roadway. |
|--------------------------------|--------------------------------------------------------------|----------------------------|------------------------------|
| I, SE                          | Eleventh                                                     | Thirteenth                 | Gravel                       |
| I, SW                          | Canal                                                        | First                      | Macadam                      |
| Do.                            | First                                                        | Third                      | Gravel                       |
| Do.                            | Third                                                        | Sixth                      | Asphalt block                |
| Do.                            | Sixth                                                        | Water                      | Gravel                       |
| Illinois avenue                | Rock Creek Church road.                                      | Grant circle               | do                           |
| Irving place                   | Thirtieth                                                    | Avon                       | Asphalt, H. B.               |
| Irving                         | Brightwood avenue                                            | Thirteenth                 | Gravel                       |
| Indiana avenue                 | First                                                        | Third                      | Asphalt                      |
| Indiana and Louisiana avenues. | Third                                                        | Seventh                    | Granite                      |
| Do.                            | do                                                           | do                         | Asphalt, H. B.               |
| Do.                            | do                                                           | do                         | Vitrified block              |
| Jackson                        | G and H                                                      | First E and First W        | Cobble                       |
| Do.                            | Nichols avenue                                               | Taylor                     | Gravel                       |
| James                          | G and H, NE                                                  | Twelfth and Thirteenth NE. | Macadam                      |
| Jefferson                      | K (Georgetown)                                               | M                          | Cobble                       |
| Do.                            | Nichols avenue                                               | Taylor                     | Gravel                       |
| Jefferson place                | M and N, NW                                                  | Eighteenth and Nineteenth  | Asphalt block                |
| Johnson                        | R and S                                                      | Fourteenth and Fifteenth   | Asphalt, B. B.               |
| Joliet                         | Connecticut avenue                                           | Zoo entrance               | Macadam                      |
| K, NW                          | North Capitol                                                | First                      | Asphalt, H. B.               |
| Do.                            | First                                                        | Third                      | Asphalt                      |
| Do.                            | Third                                                        | Seventh                    | Coal tar                     |
| Do.                            | North side Mount Vernon square.                              |                            | do                           |
| Do.                            | South side Mount Vernon square.                              |                            | Asphalt, H. B.               |
| Do.                            | Ninth                                                        | Eighteenth                 | Coal tar                     |
| Do.                            | Eighteenth                                                   | Twenty-third               | Asphalt, H. B.               |
| Do.                            | Twenty-third                                                 | Rock Creek                 | Trap rock                    |
| Do.                            | Rock Creek                                                   | Aqueduct Bridge            | Seneca stone                 |
| Do.                            | Rock Creek                                                   | Aqueduct Bridge            | Granite                      |
| K, NE                          | North Capitol                                                | First                      | Asphalt, B. B.               |
| Do.                            | First                                                        | Seventh                    | Gravel                       |
| Do.                            | Eleventh                                                     | Twelfth                    | Macadam                      |
| K, SE                          | South Capitol                                                | Second                     | do                           |
| Do.                            | Second                                                       | Sixth                      | Gravel                       |
| Do.                            | Virginia avenue                                              | Fourteenth                 | do                           |
| K, SW                          | South Capitol                                                | First                      | Granite                      |
| Do.                            | First                                                        | Water                      | Macadam                      |
| Kalorama                       | Eighteenth                                                   | Columbia road              | Asphalt block                |
| Do.                            | Nineteenth                                                   | Westward                   | Asphalt                      |
| Kansas avenue                  | Brightwood avenue                                            | Trenton                    | Gravel                       |
| Kenesaw                        | Brightwood avenue to Thirteenth and Fourteenth to Sixteenth. |                            | do                           |
| Do.                            | Thirteenth                                                   | Fourteenth                 | Asphalt block                |
| Kenesaw and Park road          | do                                                           | do                         | Macadam                      |
| Kentucky avenue                | South Capitol                                                | B                          | Gravel                       |
| Kenyon                         | Thirteenth                                                   | Fourteenth                 | Asphalt, H. B.               |
| Kingman place                  | P and Q, Thirteenth and Fourteenth.                          |                            | Asphalt                      |
| Klinge road                    | Linnean Hill road to Rock Creek.                             |                            | Macadam                      |
| Do.                            | Rock Creek                                                   | Woodley road               | Gravel                       |
| L, NW                          | North Capitol                                                | New Jersey avenue          | Asphalt, B. B.               |
| Do.                            | Fourth                                                       | Fifth                      | Granite                      |
| Do.                            | New Jersey avenue                                            | Fourth                     | Coal tar                     |
| Do.                            | Fifth                                                        | Sixth                      |                              |
| Do.                            | Eighth                                                       | Seventeenth                |                              |
| Do.                            | Connecticut avenue                                           | Twentieth                  |                              |
| Do.                            | Sixth                                                        | Eighth                     | Asphalt, H. B.               |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.     |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|--------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |              |
| 1890       | 3,100         |                        |                |             |                       |                                              |                    |               |              |
| 1891       | 1,424         |                        |                |             |                       |                                              |                    |               |              |
| 1889       | 3,530         |                        |                |             |                       |                                              |                    |               |              |
| 1896       | 4,850         | \$1.77                 | \$10,493.00    |             |                       |                                              |                    |               |              |
|            | 2,600         |                        |                |             |                       |                                              |                    |               |              |
| 1900       | 8,400         |                        |                |             |                       |                                              |                    |               |              |
| 1893       | 1,251         | 2.00                   | 2,725.00       |             | 0                     | 0                                            | 0                  | 0             |              |
| 1898       | 6,493         |                        |                |             |                       |                                              |                    |               |              |
| 1887       | 8,529         | 2.00                   | 23,824.00      |             | 0                     | \$0.007                                      |                    | \$0.013       | 4-inch base. |
| 1881       | 9,038         | 2.00                   | 33,149.00      |             |                       |                                              |                    |               |              |
| 1881       | 4,054         | 1.85                   | 6,889.00       |             | 0                     | .015                                         |                    | .016          |              |
| 1897       | 205           |                        |                |             |                       |                                              |                    |               |              |
|            | 3,800         |                        |                |             |                       |                                              |                    |               |              |
|            | 7,500         |                        |                |             |                       |                                              |                    |               |              |
|            | 1,400         |                        |                |             |                       |                                              |                    |               |              |
| 1874       | 2,839         | .70                    | 1,987.00       |             |                       |                                              |                    |               |              |
|            | 7,500         |                        |                |             |                       |                                              |                    |               |              |
| 1884       | 1,303         |                        |                |             |                       |                                              |                    |               | Permit work. |
| 1889       | 1,446         |                        | 3,887.00       |             | 0                     | 0                                            | 0                  | 0             |              |
| 1899       | 850           |                        |                |             |                       |                                              |                    |               |              |
| 1899       | 4,537         | 1.76                   | 9,859.00       |             | 0                     | 0                                            | 0                  | 0             |              |
| 1894       | 3,984         |                        | 7,130.00       |             | 0                     | 0                                            | 0                  | 0             | Rubble base. |
| 1874       | 8,384         | 3.20                   | 26,829.00      | { 1878      | \$1.65                |                                              | \$0.015            |               |              |
|            |               |                        |                | 1889        | .487                  |                                              |                    |               |              |
| 1873       | 1,800         | 3.20                   |                | 1894        | .90                   |                                              | .034               | .012          |              |
| 1895       | 2,000         |                        |                |             |                       |                                              |                    |               |              |
| 1875       | 27,551        | 3.00                   | 82,654.00      | { 1889      | .06                   | .007                                         |                    |               |              |
|            |               |                        |                | 1892        | .74                   |                                              |                    |               |              |
| 1880       | 11,671        | 1.83                   | 21,358.00      | 1895        | .557                  |                                              | .025               | .002          |              |
| 1874       | 7,521         | 3.50                   |                | 1898        | .19                   | .014                                         |                    | .027          |              |
| 1874       | 4,986         | 2.50                   | 38,813.00      |             |                       |                                              |                    |               |              |
| 1873       | 18,021        |                        | 63,075.00      |             |                       |                                              |                    |               |              |
| 1875       | 4,498         | 2.00                   | 13,513.00      |             | 0                     | 0                                            | 0                  | 0             |              |
| 1889       |               |                        |                |             |                       |                                              |                    |               |              |
|            | 15,000        |                        |                |             |                       |                                              |                    |               |              |
|            | 1,475         |                        |                |             |                       |                                              |                    |               |              |
| 1901       | 6,000         |                        |                |             |                       |                                              |                    |               |              |
|            | 3,500         |                        |                |             |                       |                                              |                    |               |              |
|            | 2,700         |                        |                |             |                       |                                              |                    |               |              |
| 1894       | 1,706         |                        | 5,654.00       |             |                       |                                              |                    |               |              |
| 1890       | 7,931         | .57                    | 11,923.00      |             |                       |                                              |                    |               |              |
| 1900       | 2,313         | 1.77                   | 4,501.00       |             |                       |                                              |                    |               |              |
| 1900       | 4,600         |                        |                |             | 0                     | 0                                            | 0                  | 0             |              |
| 1900       | 3,500         |                        |                |             |                       |                                              |                    |               |              |
| 1891       | 10,409        |                        |                |             |                       |                                              |                    |               |              |
| 1900       | 2,548         | 1.77                   | 5,125.00       |             |                       |                                              |                    |               |              |
| 1901       | 11,185        |                        |                |             |                       |                                              |                    |               |              |
| 1900       | 3,755         |                        |                |             |                       |                                              |                    |               |              |
| 1900       | 2,964         | 1.76                   | 5,354.00       |             | 0                     | 0                                            | 0                  | 0             |              |
| 1889       | 1,699         |                        |                |             |                       |                                              |                    |               |              |
| 1901       | 4,877         |                        | 4,579.00       |             |                       | .003                                         |                    | .006          |              |
|            | 7,600         |                        |                |             |                       |                                              |                    |               |              |
| 1890       | 5,288         |                        | 13,997.00      |             |                       | .002                                         |                    | .001          |              |
| 1877       | 2,665         | 1.78                   | 4,744.00       |             |                       |                                              |                    |               |              |
| 1877       | 23,800        | 2.18                   | 51,115.00      | { 1887      |                       | .002                                         |                    |               |              |
|            |               |                        |                | 1889        |                       |                                              | .005               |               |              |
| 1883       | 2,645         | 2.27                   | 6,017.00       | 1891        |                       |                                              | .02                |               |              |
|            |               |                        |                | 1897        |                       |                                              | .045               | .017          |              |
|            |               |                        |                |             |                       | .038                                         |                    | .065          |              |

TABLE D.—*Descriptive list of street pavements and suburban roadways.*

| Street.               | From—                       | To—                         | Kind of pavement or roadway. |
|-----------------------|-----------------------------|-----------------------------|------------------------------|
| L, NW                 | Seventeenth                 | Connecticut avenue          | Coal tar                     |
| Do                    | Twentieth                   | Twenty-fifth                | Asphalt, H. B.               |
| Do                    | Pennsylvania avenue         | Twenty-sixth                | do                           |
| Do                    | Twenty-sixth                | Twenty-seventh              | Asphalt, B. B.               |
| L, NE                 | N. Capitol                  | Eighth                      | Macadam                      |
| L, SE                 | S. Capitol                  | Second                      | do                           |
| Do                    | Second                      | Fourth                      | Gravel                       |
| Do                    | Fourth                      | Eighth                      | do                           |
| L, SW                 | S. Capitol                  | Four-and-a-half             | do                           |
| Do                    | Four-and-a-half             | Water                       | Macadam                      |
| Lansing               | Tenth                       | Thirteenth                  | Gravel                       |
| Lamar                 |                             |                             | do                           |
| Leroy place           | Connecticut avenue          | Phelps place                | Asphalt, H. B.               |
| Linnean Mill road     |                             | Gravel                      |                              |
| Lincoln avenue        |                             | do                          |                              |
| Loughboro road        |                             | do                          |                              |
| Louisiana avenue      | Intersection C and seventh. |                             | Asphalt, H. B.               |
| Do                    | Intersection C and Seventh. |                             | Vitrified block              |
| Do                    | Front of Opera House.       |                             | Granite                      |
| Do                    | Eighth                      | Ninth                       | do                           |
| Do                    | Ninth                       | Tenth                       | do                           |
| Lowell                | Sixteenth                   | Eighteenth                  | Macadam                      |
| Lydecker              | Whitney avenue              | Fourteenth                  | Gravel                       |
| M, NW                 | N. Capitol                  | First                       | Asphalt, H. B.               |
| Do                    | First                       | New Jersey avenue           | Asphalt, B. B.               |
| Do                    | New Jersey avenue           | Sixth                       | Asphalt, H. B.               |
| Do                    | Sixth                       | Fourteenth                  | do                           |
| Do                    | Fourteenth                  | Sixteenth                   | do                           |
| Do                    | Sixteenth                   | Eighteenth                  | Coal tar                     |
| Do                    | Eighteenth                  | New Hampshire avenue        | Asphalt, H. B.               |
| Do                    | Twenty-first                | Twenty-sixth                | do                           |
| Do                    | Twenty-sixth                | Rock Creek                  | do                           |
| Do                    | Rock Creek                  | Twenty-eighth               | Coal tar                     |
| Do                    | Twenty-eighth               | Thirty-first                | do                           |
| M, NW (S. side)       | Thirty-first                | Thirty-second               | Asphalt, H. B.               |
| M, NW (N. side)       | do                          | do                          | do                           |
| M, NW                 | Thirty-second               | Thirty-third                | do                           |
| Do                    | Thirty-third                | Thirty-sixth                | do                           |
| M, NE                 | North Capitol               | Second                      | do                           |
| Do                    | Second                      | Florida avenue              | do                           |
| Do                    | Twelfth                     | Trinidad avenue             | Macadam                      |
| M, SE                 | South Capital               | New Jersey avenue           | Cobble                       |
| Do                    | New Jersey avenue           | Fourth                      | Rubble                       |
| Do                    | Fourth                      | Ninth                       | Cobble                       |
| M, SW                 | South Capital               | Four-and-a-half             | Rubble                       |
| Do                    | Four-and-a-half             | Sixth                       | Granite                      |
| Do                    | do                          | Water                       | do                           |
| Madison               | P and Q                     | Fifteenth and Seventeenth   | Coal tar                     |
| Do                    | do                          | Seventeenth and Eighteenth. | Asphalt, B. B.               |
| Do                    | M and N                     | Sixth and Seventh           | do                           |
| McLean avenue         | N and O                     | Third and Four-and-a-half   | Asphalt block                |
| Magnolia              | Chestnut                    | Oak                         | Gravel                       |
| Maple (Takoma)        | B & O. R. R                 | District line               | do                           |
| Maple (Le Droit Park) | Florida avenue              | Second                      | Asphalt, B. B.               |
| Do                    | Second                      | Fourth                      | Asphalt, H. B.               |
| Maple (Anacostia)     | Pleasant                    | High                        | Gravel                       |
| Maine avenue          | Third                       | Sixth                       | Cobble                       |
| Marion                | P and Q                     | Sixth and Seventh           | Asphalt, B. B.               |
| Maryland avenue NE    | First                       | Fourth                      | Asphalt block                |
| Do                    | Sixth                       | Eleventh                    | do                           |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks. |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|----------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |          |
| 1873       | 1,628         | \$3.20                 | \$5,210.00     | { 1878      | \$1.96                | -----                                        | \$0.015            | -----         |          |
| 1883       | 8,141         | 2.26                   | 18,662.00      | { 1888      | .58                   | -----                                        | .035               | -----         |          |
| 1884       | 483           | 2.25                   | 1,089.00       | -----       | -----                 | \$0.043                                      | -----              | -----         |          |
| 1889       | 1,179         | 2.00                   | 2,358.00       | -----       | 0                     | .04                                          | 0                  | .135          |          |
| 1890       | 1,500         | -----                  | -----          | -----       | -----                 | 0                                            | 0                  | 0             |          |
| 1901       | 6,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1897       | 6,030         | -----                  | 2,700.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1889       | 4,332         | -----                  | 4,681.01       | -----       | -----                 | -----                                        | -----              | -----         |          |
| -----      | 3,625         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| -----      | 3,400         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1895       | 1,706         | 1.93                   | 3,817.00       | -----       | 0                     | 0                                            | 0                  | 0             |          |
| -----      | 8,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| -----      | 30,000        | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| -----      | 10,600        | -----                  | -----          | -----       | 0                     | 0                                            | 0                  | 0             |          |
| -----      | 2,702         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1900       | 384           | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1872       | 784           | 3.25                   | 2,548.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1879       | 1,137         | 1.91                   | 2,274.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1872       | 4,765         | 3.25                   | 15,468.00      | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1901       | 1,850         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| -----      | 3,600         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1894       | 3,067         | 2.18½                  | 7,265.00       | -----       | 0                     | 0                                            | 0                  | 0             |          |
| 1890       | 2,597         | 2.00                   | 6,711.00       | -----       | -----                 | .0013                                        | -----              | -----         |          |
| 1880       | 5,564         | 1.85                   | 15,158.00      | -----       | -----                 | .012                                         | -----              | .016          |          |
| 1879       | 13,147        | 1.75                   | 32,199.00      | { 1895      | .58                   | -----                                        | .035               | -----         |          |
| 1881       | 4,573         | 2.08                   | 9,788.00       | { 1900      | -----                 | .04                                          | -----              | .03           |          |
| 1873       | 5,851         | 3.20                   | 18,723.00      | -----       | 0                     | .02                                          | -----              | .06           |          |
| 1879       | 6,084         | 1.47                   | 9,143.00       | { 1878      | 1.49                  | -----                                        | .025               | .012          |          |
| -----      | -----         | -----                  | -----          | { 1895      | -----                 | .03                                          | -----              | .066          |          |
| 1882       | 9,171         | 2.26                   | 2,188.00       | -----       | -----                 | .02                                          | -----              | .041          |          |
| 1895       | 500           | -----                  | -----          | { 1895      | 2.36                  | -----                                        | -----              | -----         |          |
| 1877       | 1,138         | 2.67                   | 3,069.00       | { 1897      | 1.36                  | .04                                          | -----              | 0             |          |
| 1875       | 7,887         | 3.70                   | 31,966.00      | 1888        | .693                  | .15                                          | -----              | .063          |          |
| 1897       | 762           | 1.63                   | 1,926.00       | -----       | 0                     | 0                                            | 0                  | .044          |          |
| 1898       | 778           | 1.55                   | 1,803.00       | -----       | 0                     | 0                                            | 0                  | 0             |          |
| 1898       | 3,581         | 1.57½                  | 8,736.00       | -----       | 0                     | 0                                            | 0                  | 0             |          |
| 1897       | 4,476         | 1.63                   | 10,824.00      | -----       | 0                     | 0                                            | 0                  | 0             |          |
| 1894       | 5,486         | 2.10                   | 15,445.00      | -----       | 0                     | 0                                            | 0                  | 0             |          |
| 1896       | 7,183         | 1.63                   | 16,788.00      | -----       | 0                     | 0                                            | 0                  | 0             |          |
| 1895       | 3,449         | .49½                   | 2,666.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1876       | 5,724         | .70                    | 4,007.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1876       | 6,973         | 1.50                   | 10,460.00      | -----       | -----                 | -----                                        | -----              | -----         |          |
| -----      | 8,454         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1876       | 9,177         | 1.05                   | 9,636.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1891       | 1,125         | -----                  | 4,120.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1891       | 757           | -----                  | 2,763.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1875       | 2,674         | 3.00                   | 8,022.00       | -----       | -----                 | .032                                         | -----              | 0             |          |
| 1892       | 2,271         | 2.00                   | 7,122.00       | -----       | -----                 | .012                                         | -----              | .002          |          |
| 1880       | 1,538         | 2.00                   | 4,619.00       | -----       | -----                 | .009                                         | -----              | 0             |          |
| 1887       | 2,127         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| -----      | 4,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| -----      | 2,500         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1890       | 5,237         | 2.00                   | -----          | -----       | 0                     | 0                                            | 0                  | 0             |          |
| 1891       | 3,680         | 2.25                   | 11,486.00      | -----       | -----                 | .001                                         | -----              | 0             |          |
| -----      | 3,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1872       | 4,634         | .70                    | 3,244.00       | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1889       | 2,861         | 2.00                   | 7,766.00       | -----       | -----                 | .002                                         | -----              | .004          |          |
| 1887       | 11,535        | 2.00                   | 29,945.00      | -----       | -----                 | -----                                        | -----              | -----         |          |
| 1889       | 14,951        | 2.00                   | 39,634.00      | -----       | -----                 | -----                                        | -----              | -----         |          |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                 | From—                   | To—                           | Kind of pavement<br>or roadway. |
|-------------------------|-------------------------|-------------------------------|---------------------------------|
| Maryland avenue NE..    | Eleventh .....          | Thirteenth .....              | Asphalt block.....              |
| Do .....                | Thirteenth .....        | Fifteenth .....               | do .....                        |
| Do .....                | Intersection .....      | Fifteenth .....               | Asphalt, H. B. ....             |
| Maryland avenue SW..    | First .....             | Third .....                   | do .....                        |
| Do .....                | Third .....             | Seventh .....                 | Cobble .....                    |
| Do .....                | do .....                | do .....                      | Rubble .....                    |
| Do .....                | Seventh .....           | Fourteenth .....              | Belgian .....                   |
| Massachusetts avenue    | North Capitol .....     | New Jersey avenue .....       | Coal tar .....                  |
| NW.                     |                         |                               |                                 |
| Do .....                | New Jersey avenue ..... | Third .....                   | Asphalt, H. B. ....             |
| Massachusetts avenue    | Fourth .....            | Seventh .....                 | do .....                        |
| NW. (south side).       |                         |                               |                                 |
| Massachusetts avenue    | do .....                | do .....                      | do .....                        |
| NW. (north side).       |                         |                               |                                 |
| Massachusetts avenue    | Intersection Fourth.    |                               | do .....                        |
| NW.                     |                         |                               |                                 |
| Do .....                | Intersection Fifth.     |                               | do .....                        |
| Do .....                | Ninth .....             | Thirteenth .....              | do .....                        |
| Do .....                | Thirteenth .....        | Fourteenth .....              | Asphalt, B. B. ....             |
| Do .....                |                         |                               |                                 |
| Do .....                | Fourteenth .....        | Twentieth .....               | Coal tar .....                  |
| Do .....                | Highland Terrace, F     | Fourteenth to Fifteenth.      | do .....                        |
| Triangular reservation  |                         |                               | do .....                        |
| north of Twentieth      |                         |                               |                                 |
| street.                 |                         |                               |                                 |
| Massachusetts avenue    | Twentieth .....         | Florida avenue .....          | do .....                        |
| NW.                     |                         |                               |                                 |
| Do .....                | Florida avenue .....    | Sheridan circle .....         | Asphalt, H. B. ....             |
| Sheridan circle .....   |                         |                               | do .....                        |
| Massachusetts avenue    | Circle .....            | Belmont .....                 | Macadam .....                   |
| NW.                     |                         |                               |                                 |
| Massachusetts avenue    | North Capitol .....     | First .....                   | Asphalt, H. B. ....             |
| NE.                     |                         |                               |                                 |
| Do .....                | First .....             | Second .....                  | Asphalt block .....             |
| Do .....                | Second .....            | Fourth .....                  | Asphalt, H. B. ....             |
| Do .....                | do .....                | do .....                      | do .....                        |
| Do .....                | Sixth .....             | Eighth .....                  | Asphalt block .....             |
| Do .....                | Eighth .....            | Eleventh .....                | do .....                        |
| Michigan avenue .....   | North Capitol .....     | Lincoln avenue .....          | Macadam .....                   |
| Military road .....     |                         |                               | do .....                        |
| Do .....                |                         |                               | Gravel .....                    |
| Milwaukee .....         |                         |                               | do .....                        |
| Minnesota avenue .....  | Harrison .....          | Pennsylvania avenue .....     | do .....                        |
| Missouri avenue .....   | Third .....             | Four-and-a-half .....         | Granite .....                   |
| Do .....                | Four-and-a-half .....   | Sixth .....                   | Asphalt block .....             |
| Morgan .....            | M and N .....           | New Jersey avenue and         | Asphalt, H. B. ....             |
| Do .....                | Lydecker .....          | Kirby .....                   | Gravel .....                    |
| Morris place .....      | F and G, NE.            | Spring road .....             | Asphalt block .....             |
| Murdock Mill road ..... |                         | Sixth and Seventh .....       | Gravel .....                    |
| Myrtle .....            | I and K .....           | North Capitol and First ..... | Asphalt, B. B. ....             |
| Mount Olivet road ..... |                         |                               | Gravel .....                    |
| N, NW .....             | North Capitol .....     | Third .....                   | Asphalt, H. B. ....             |
| Do .....                | New Jersey avenue ..... | Fifth .....                   | Asphalt, B. B. ....             |
| Do .....                | Fifth .....             | Ninth .....                   | Asphalt, H. B. ....             |
| Do .....                | Ninth .....             | Fourteenth .....              | do .....                        |
| Do .....                | Fourteenth .....        | Scott square .....            | do .....                        |
| Do .....                | Scott square .....      | New Hampshire avenue .....    | Coal tar .....                  |
| Do .....                | New Hampshire ave-      | Twenty-first .....            | do .....                        |
| Do .....                | nue.                    |                               |                                 |
| Do .....                | Twenty-first .....      | Twenty-second .....           | Asphalt .....                   |
| Do .....                | Twenty-second .....     | Twenty-fourth .....           | Asphalt, H. B. ....             |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.    |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|-------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |             |
| 1890       | 8,269         | \$2.00                 | \$22,966.00    |             |                       |                                              |                    |               |             |
| 1891       | 9,635         | 2.00                   | 24,840.00      |             |                       |                                              |                    |               |             |
| 1891       | 2,360         |                        |                |             | 0                     | 0                                            | 0                  | 0             |             |
| 1883       | 3,384         | 2.29                   | 7,800.00       |             |                       | \$0.02                                       |                    | \$0.005       |             |
| 1873       | 8,750         | .70                    | 6,125.00       |             |                       |                                              |                    |               |             |
| 1873       | 4,050         | 1.75                   | 7,113.00       |             |                       |                                              |                    |               |             |
| 1875       | 26,269        | 3.50                   | 95,046.00      |             |                       |                                              |                    |               |             |
| 1887       | 5,143         | 1.98                   | 14,179.00      |             |                       | .046                                         |                    | .063          |             |
| 1882       | 3,858         | 2.26                   | 8,834.00       | 1891        | \$1.43                | .035                                         | \$0.044            | .005          |             |
| 1881       | 3,910         | 1.83                   | 7,349.00       | 1889        | .309                  | .093                                         | .088               | 0             |             |
| 1883       | 3,108         | 2.29                   | 7,112.00       |             |                       | .057                                         |                    | .071          |             |
| 1877       | 742           | 1.95                   | 1,447.00       |             |                       | .024                                         | 0                  | 0             |             |
| 1877       | 498           | 1.95                   | 971.00         | 1899        |                       | .057                                         | 0                  | 0             |             |
| 1880       | 9,920         | 1.47                   | 14,749.00      |             |                       | .012                                         |                    | .009          |             |
| 1877       | 2,991         | 2.18                   | 6,520.00       | 1884        | 1.43                  | .015                                         | 0.56               | .006          |             |
| 1873       | 13,898        | 3.20                   | 44,474.00      | { 1892      | .17                   | .015                                         | .043               |               |             |
| 1873       | 1,248         | 3.20                   | 3,995.00       | { 1895      | .68                   |                                              | .135               | .007          |             |
| 1873       | 2,646         | 3.20                   | 8,468.00       |             |                       | .005                                         |                    | .016          |             |
|            |               |                        |                |             |                       | .025                                         |                    | 0             |             |
| 1875       | 5,817         | 3.00                   | 17,453.00      |             |                       | .019                                         |                    | .104          |             |
| 1897       | 2,572         | 1.57                   | 4,994.00       |             | 0                     | 0                                            | 0                  | 0             |             |
| 1900       | 5,156         | 1.78                   | 12,023.00      |             | 0                     | 0                                            | 0                  | 0             |             |
| 1890       | 12,250        |                        |                |             | 0                     | 0                                            | 0                  | 0             |             |
| 1891       | 4,069         | 2.25                   | 12,102.00      |             |                       | .008                                         |                    | 0             |             |
| 1893       | 3,961         | 2.00                   | 11,684.00      |             |                       |                                              |                    |               |             |
| 1895       | 5,223         | 1.68                   | 11,121.00      |             | 0                     | 0                                            | 0                  | 0             |             |
| 1896       | 419           | 2.19                   | 1,025.00       |             | 0                     | 0                                            | 0                  | 0             |             |
| 1880       | 6,749         | 2.00                   | 16,444.00      |             |                       |                                              |                    |               |             |
| 1895       | 6,398         | 1.84                   | 13,677.00      |             |                       |                                              |                    |               |             |
| 1901       | 12,816        |                        |                |             |                       |                                              |                    |               |             |
|            | 6,400         |                        |                |             |                       |                                              |                    |               |             |
|            | 10,000        |                        |                |             |                       |                                              |                    |               |             |
|            | 8,000         |                        |                |             |                       |                                              |                    |               |             |
| 1892       | 21,226        |                        |                |             |                       |                                              |                    |               |             |
| 1884       | 2,562         |                        | 6,330.00       |             |                       |                                              |                    |               |             |
| 1894       | 1,371         | 2.00                   | 4,589.00       |             |                       |                                              |                    |               |             |
| 1892       | 1,307         | 2.25                   | 4,472.00       |             | 0                     | 0                                            | 0                  | 0             |             |
|            | 3,200         |                        |                |             |                       |                                              |                    |               |             |
| 1897       | 1,644         | 1.77                   | 3,304.00       |             |                       |                                              |                    |               |             |
| 1889       | 10,000        |                        |                |             |                       |                                              |                    |               |             |
|            | 1,426         | 2.00                   | 4,895.00       |             |                       | 0.009                                        |                    | 0             |             |
|            | 6,000         |                        |                |             |                       |                                              |                    |               |             |
| 1892       | 5,642         | 2.25                   | 17,341.00      |             |                       | .0007                                        |                    | 0             |             |
| 1890       | 3,311         | 2.00                   | 9,140.00       |             |                       | .0007                                        |                    | 0             |             |
| 1883       | 4,454         | 2.28                   | 10,160.00      |             |                       | .045                                         |                    | .07           |             |
| 1880       | 6,802         | 4.47                   | 12,421.00      | { 1894      | .119                  | .026                                         | .017               |               |             |
|            |               |                        |                | { 1899      | .517                  |                                              | .005               | .002          |             |
| 1881       | 3,249         | 1.84                   | 6,236.00       |             |                       | .004                                         |                    | 0             |             |
| 1873       | 6,556         | 3.20                   | 20,982.00      | { 1878      | 1.24                  |                                              | .04                |               |             |
|            |               |                        |                | { 1894      | .70                   |                                              | .29                |               |             |
| 1875       | 517           | 3.60                   | 1,656.00       | { 1898      | 1.177                 |                                              | .066               | .019          |             |
|            |               |                        |                |             |                       | .032                                         |                    |               |             |
| 1892       | 2,081         | 2.00                   | 6,361.00       |             | 0                     | 0                                            | 0                  | 0             | 4-inch base |
| 1892       | 2,196         | 2.25                   | 9,633.00       |             | 0                     | 0                                            | 0                  | 0             |             |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                             | From—                           | To—                        | Kind of pavement or roadway. |
|-------------------------------------|---------------------------------|----------------------------|------------------------------|
| N. NW .....                         | Twenty-seventh .....            | Twenty-eighth .....        | Asphalt block .....          |
| Do. ....                            | Twenty-eighth .....             | Thirtieth .....            | Asphalt .....                |
| Do. ....                            | Thirtieth .....                 | Thirty-second .....        | Asphalt, H. B. ....          |
| Do. ....                            | Thirty-second .....             | Thirty-fifth .....         | do .....                     |
| N. SE .....                         | Canal .....                     | Third .....                | Rubble .....                 |
| N. SW .....                         | do .....                        | do .....                   | Cobble .....                 |
| Do. ....                            | Third .....                     | Four-and-a-half .....      | Asphalt, H. B. ....          |
| Do. ....                            | Four-and-a-half .....           | Sixth .....                | do .....                     |
| Naylor road .....                   | .....                           | .....                      | Gravel .....                 |
| Newark .....                        | Tenallytown road eastward ..... | .....                      | Macadam .....                |
| Newark (Fort) .....                 | Bunker Hill road eastward ..... | .....                      | Gravel .....                 |
| New Cut road .....                  | .....                           | .....                      | Macadam .....                |
| New Hampshire avenue .....          | G .....                         | Pennsylvania avenue .....  | Rubble .....                 |
| Do. ....                            | Pennsylvania avenue .....       | M .....                    | Asphalt, H. B. ....          |
| Do. ....                            | M .....                         | P .....                    | do .....                     |
| Do. ....                            | P .....                         | Q .....                    | do .....                     |
| Do. ....                            | Q .....                         | R .....                    | Asphalt, B. B. ....          |
| Do. ....                            | R .....                         | T .....                    | do .....                     |
| Do. ....                            | T .....                         | V .....                    | do .....                     |
| Do. ....                            | Rock Creek Church road .....    | Omaha .....                | do .....                     |
| New Jersey avenue .....             | B. N. ....                      | C. N. ....                 | Coal tar .....               |
| Do. ....                            | C .....                         | D .....                    | do .....                     |
| New Jersey avenue (east side) ..... | C .....                         | D .....                    | Granite .....                |
| New Jersey avenue .....             | D .....                         | L .....                    | Asphalt, H. B. ....          |
| Do. ....                            | L .....                         | New York avenue .....      | do .....                     |
| Do. ....                            | M .....                         | Florida avenue .....       | Coal tar .....               |
| New Jersey avenue SE. ....          | B .....                         | E .....                    | Granite .....                |
| Do. ....                            | I .....                         | M .....                    | Macadam .....                |
| Do. ....                            | M .....                         | N .....                    | Gravel .....                 |
| New York avenue .....               | North Capitol .....             | New Jersey avenue .....    | Asphalt, B. B. ....          |
| Do. ....                            | New Jersey avenue .....         | Seventh .....              | do .....                     |
| Do. ....                            | Ninth .....                     | Fifteenth .....            | do .....                     |
| Do. ....                            | do .....                        | Fourteenth .....           | Asphalt, H. B. ....          |
| New York avenue (north side) .....  | Fourteenth .....                | Fifteenth .....            | Coal tar .....               |
| New York avenue .....               | Seventeenth .....               | Eighteenth .....           | do .....                     |
| Do. ....                            | Nineteenth .....                | Twenty-third .....         | Macadam .....                |
| North Capitol .....                 | B .....                         | C .....                    | Asphalt, H. B. ....          |
| Do. ....                            | D .....                         | E .....                    | Granite .....                |
| Do. ....                            | E .....                         | Massachusetts avenue ..... | Coal tar .....               |
| Do. ....                            | Massachusetts avenue .....      | I .....                    | do .....                     |
| Do. ....                            | I .....                         | K .....                    | do .....                     |
| Do. ....                            | K .....                         | M .....                    | Asphalt, H. B. ....          |
| Do. ....                            | M .....                         | New York avenue .....      | do .....                     |
| Do. ....                            | New York avenue .....           | O .....                    | do .....                     |
| Do. ....                            | O .....                         | Q .....                    | do .....                     |
| North Capitol (west side) .....     | P .....                         | Florida avenue .....       | do .....                     |
| Do. ....                            | Florida avenue .....            | R .....                    | do .....                     |
| Do. ....                            | R .....                         | T .....                    | Macadam .....                |
| Nichols avenue .....                | .....                           | .....                      | Granite .....                |
| Do. ....                            | .....                           | .....                      | do .....                     |
| Do. ....                            | .....                           | .....                      | Gravel .....                 |
| North Carolina avenue SE. ....      | First .....                     | Second .....               | Asphalt block .....          |
| Do. ....                            | Third .....                     | Sixth .....                | do .....                     |
| Do. ....                            | Sixth .....                     | Eighth .....               | do .....                     |
| Do. ....                            | Eighth .....                    | Eleventh .....             | do .....                     |





TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                               | From—                   | To—                     | Kind of pavement or roadway. |
|---------------------------------------|-------------------------|-------------------------|------------------------------|
| O, NW                                 | North Capitol           | First                   | Gravel                       |
| Do.                                   | First                   | Third                   | Asphalt, H. B.               |
| Do.                                   | do                      | do                      | do                           |
| Do.                                   | New Jersey avenue       | Vermont avenue          | Coal tar                     |
| Do.                                   | Vermont avenue          | Thirteenth              | Asphalt, H. B.               |
| Do.                                   | Fifteenth               | Sixteenth               | Coal tar                     |
| Do.                                   | Sixteenth               | Seventeenth             | Asphalt, H. B.               |
| Do.                                   | Twentieth               | Twenty-first            | Coal tar                     |
| Do.                                   | Twenty-first            | Twenty-second           | Asphalt, B. B.               |
| Do.                                   | Twenty-eighth           | Twenty-ninth            | do                           |
| Do.                                   | Twenty-ninth            | Thirty-second           | Asphalt, H. B.               |
| Do.                                   | Thirty-second           | Thirty-fifth            | Granite                      |
| Do.                                   | Thirty-fifth            | College gate            | Coal tar                     |
| Oak                                   | Brown                   | Center                  | Gravel                       |
| Do.                                   | Carroll avenue          | Magnolia                | do                           |
| Ohio avenue                           | Twelfth                 | Fourteenth              | Cobble                       |
| Do.                                   | Fourteenth              | Fifteenth               | do                           |
| Olive                                 | Twenty-eighth           | Thirtieth               | Asphalt block                |
| Omaha                                 | New Hampshire avenue    | Fifth                   | Asphalt, B. B.               |
| Do.                                   | Bunker Hill road        | Thirteenth              | Gravel                       |
| Ontario                               | Superior                | Columbia road           | do                           |
| P, NW                                 | North Capitol           | Fourth                  | Asphalt, B. B.               |
| Do.                                   | New Jersey avenue       | Ninth                   | Asphalt, H. B.               |
| Do.                                   | Ninth                   | Fifteenth               | do                           |
| Do.                                   | Fifteenth               | Eighteenth              | do                           |
| Do.                                   | Eighteenth              | Twentieth               | Coal tar                     |
| Do.                                   | Twentieth               | Twenty-second           | Granite                      |
| Do.                                   | Twenty-second           | Rock Creek              | Coal tar                     |
| Do.                                   | Rock Creek              | 340' west               | do                           |
| Do.                                   | 340' west of Rock Creek | Thirtieth               | Granite                      |
| Do.                                   | Thirtieth               | Thirty-second           | do                           |
| Do.                                   | Thirty-second           | Thirty-fifth            | do                           |
| Do.                                   | Thirty-fifth            | Thirty-sixth            | Asphalt, H. B.               |
| P, NE                                 | North Capitol           | Florida avenue          | do                           |
| P, SW                                 | Four-and-a-half         | Water                   | Granite                      |
| Park                                  | Fourteenth              | Seventeenth             | Macadam                      |
| Park place                            | B and C, NE             | Eleventh and Twelfth    | Gravel                       |
| Patterson                             | M and N                 | North Capitol and First | do                           |
| Pennsylvania avenue                   | First                   | Seventh                 | Asphalt, H. B.               |
| Do.                                   | Seventh                 | Fifteenth               | do                           |
| Do.                                   | Intersections           | First to Fifteenth.     | do                           |
| Do.                                   | Fifteenth               | Seventeenth             | do                           |
| Do.                                   | Seventeenth             | Eighteenth              | Coal tar                     |
| Pennsylvania avenue (north side).     | Eighteenth              | Twenty-first            | Asphalt, H. B.               |
| Pennsylvania avenue                   | Twenty-first            | Twenty-third            | Coal tar                     |
| Pennsylvania avenue (south side).     | Eighteenth              | do                      | do                           |
| Pennsylvania avenue (north side).     | Twenty-third            | Twenty-sixth            | do                           |
| Pennsylvania avenue (south side).     | Twenty-sixth            | Rock Creek              | do                           |
| Pennsylvania avenue (south side).     | Twenty-third            | Twenty-fourth           | Asphalt, H. B.               |
| Pennsylvania avenue                   | Twenty-fourth           | Twenty-sixth            | do                           |
| Do.                                   | Rock Creek              | M                       | Coal tar                     |
| Pennsylvania avenue, SE (north side). | Second                  | Eighth                  | Asphalt, B. B.               |
| Pennsylvania avenue (south side).     | do                      | Fourth                  | Asphalt, H. B.               |
| Do.                                   | Fourth                  | Seventh                 | do                           |
| Pennsylvania avenue (north side).     | Eighth                  | Eleventh                | do                           |
| Pennsylvania avenue                   | do                      | do                      | Asphalt, B. B.               |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.         |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                  |
| 1869       | 2,750         |                        |                |             |                       |                                              |                    |               | Complete.        |
| 1869       | 3,028         | \$1.76                 | \$6,184.00     |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1875       | 13,361        | 1.78                   | 43,714.00      | 1881        | \$0.566               | \$0.018                                      | \$0.05             | \$0.042       |                  |
| 1882       | 481           | 2.00                   | 1,080.00       |             |                       | .063                                         |                    | 0             |                  |
| 1875       | 1,663         | 3.00                   | 4,988.00       |             |                       | .007                                         |                    | 0             |                  |
| 1883       | 1,697         | 2.29                   | 3,886.00       |             |                       | .052                                         |                    | 0             |                  |
| 1887       | 2,011         | 1.97                   | 5,131.00       |             |                       | .007                                         |                    | .026          |                  |
| 1889       | 2,398         | 2.00                   | 1,966.00       |             |                       | 0                                            |                    | .034          |                  |
| 1890       | 860           | 2.00                   | 2,328.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1883       | 4,829         | 2.25                   | 11,426.00      |             |                       | .044                                         |                    | .056          | Laid on old base |
| 1879       | 4,435         | 1.93                   | 8,744.00       |             |                       |                                              |                    |               |                  |
| 1888       | 2,398         | 2.00                   | 8,279.00       |             |                       | .018                                         |                    | .03           |                  |
| 1891       | 1,000         |                        |                |             |                       |                                              |                    |               |                  |
| 1891       | 1,525         |                        |                |             |                       |                                              |                    |               |                  |
| 1872       | 6,527         | .70                    | 4,570.00       |             |                       |                                              |                    |               |                  |
| 1874       | 2,642         | .70                    | 1,850.00       |             |                       |                                              |                    |               |                  |
| 1899       | 1,674         | 1.77                   | 3,834.00       |             |                       |                                              |                    |               |                  |
| 1892       | 3,536         | 2.00                   | 7,072.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 3,000         |                        |                |             |                       |                                              |                    |               | Do.              |
| 1895       | 4,875         |                        |                |             |                       |                                              |                    |               |                  |
| 1891       | 7,938         | 2.00                   | 23,995.00      |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1884       | 5,166         | 2.25                   | 12,397.00      |             |                       | .061                                         |                    | .046          |                  |
| 1883       | 8,156         | 2.29                   | 19,008.00      |             |                       | .057                                         |                    | .04           |                  |
| 1884       | 8,076         | 2.25                   | 18,221.00      | 1901        |                       | .043                                         |                    | .01           |                  |
| 1873       | 1,569         | 3.20                   | 5,021.00       | 1878        | 1.01                  |                                              | .036               | 0             |                  |
| 1879       | 3,481         | 2.15                   | 7,397.00       | 1896        | .656                  |                                              | .047               | 0             |                  |
| 1872       | 1,078         | 3.20                   | 3,452.00       | 1881        | 1.30                  | .012                                         | .108               | 0             |                  |
| 1872       | 1,590         | 3.20                   | 5,088.00       | 1897        | 1.82                  |                                              |                    | 0             |                  |
| 1879       | 6,869         | 2.15                   | 14,498.00      | 1887        | 1.314                 |                                              | .036               | 0             | Do.              |
| 1879       | 4,011         | 1.95                   | 7,969.00       |             |                       |                                              |                    |               |                  |
| 1884       | 3,624         | .85                    | 4,655.00       |             |                       |                                              |                    |               |                  |
| 1900       | 938           | 1.78                   | 2,721.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1896       | 2,539         | 1.63                   | 7,224.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 2,000         |                        |                |             |                       |                                              |                    |               |                  |
|            | 6,000         |                        |                |             |                       |                                              |                    |               |                  |
|            | 1,700         |                        |                |             |                       |                                              |                    |               |                  |
|            | 2,700         |                        |                |             |                       |                                              |                    |               |                  |
| 1890       | 28,486        | 1.184                  |                |             |                       |                                              |                    |               | Do.              |
| 1890       | 33,974        | 1.184                  |                | 1900        | .099                  |                                              | .013               | .007          |                  |
| 1877       | 16,061        |                        |                |             |                       |                                              |                    |               |                  |
| 1890       | 11,497        |                        |                | 1900        | .68                   | 0                                            | 0                  | 0             |                  |
| 1871       | 5,520         | 3.26                   |                |             |                       |                                              | .106               | .025          |                  |
| 1898       | 5,884         | 2.18                   | 16,252.00      |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1875       | 9,423         | 3.20                   |                | 1886        | .20                   | .02                                          | .058               |               |                  |
| 1875       | 10,078        | 3.20                   | 37,290.00      | 1888        | .55                   |                                              | .023               |               |                  |
|            |               |                        |                | 1893        | .13                   |                                              | .019               | .005          |                  |
| 1877       | 7,383         | 2.67                   | 19,713.00      | 1888        | .364                  | .014                                         |                    |               | Do.              |
| 1880       | 1,225         | 1.84                   | 2,289.00       | 1894        | .828                  |                                              | .045               | .024          |                  |
| 1883       | 4,145         | 2.25                   | 9,405.00       |             |                       | .053                                         |                    | .027          |                  |
| 1877       | 1,837         |                        |                |             |                       | .033                                         |                    | .014          |                  |
| 1876       | 14,755        | 3.00                   | 44,266.00      | 1882        | 1.45                  | .004                                         | .022               | .05           |                  |
| 1879       | 4,458         | 1.47                   | 6,554.00       |             |                       | .005                                         |                    | .032          |                  |
| 1879       | 6,126         | 1.47                   | 9,115.00       |             |                       | .042                                         |                    | .0006         |                  |
| 1883       | 5,320         | 2.33                   | 12,781.00      |             |                       | .024                                         |                    | .072          |                  |
| 1888       | 5,400         | 2.00                   | 11,896.00      |             |                       | .008                                         |                    | .034          |                  |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                   | From—                        | To—                                       | Kind of pavement or roadway. |
|---------------------------|------------------------------|-------------------------------------------|------------------------------|
| Pennsylvania avenue ..    | Eleventh .....               | Twelfth .....                             | Asphalt, H. B. ....          |
| Do .....                  | Twelfth .....                | Bridge .....                              | Macadam .....                |
| Do .....                  | Eastern Branch .....         | Branch avenue .....                       | Gravel .....                 |
| Phelps place .....        | Bancroft .....               | California .....                          | Asphalt, H. B. ....          |
| Philadelphia .....        | Bunker Hill road .....       | Thirtieth .....                           | Gravel .....                 |
| Pierce .....              | L and M .....                | New Jersey avenue and North Capitol ..... | Asphalt, B. B. ....          |
| Pierce place .....        | S and T .....                | Fourteenth and Fifteenth .....            | Coal tar .....               |
| Do .....                  | do .....                     | Fifteenth and Sixteenth .....             | Asphalt .....                |
| Piney Branch road .....   | .....                        | .....                                     | Gravel .....                 |
| Pleasant Drive .....      | .....                        | .....                                     | Macadam .....                |
| .....                     | .....                        | .....                                     | Gravel .....                 |
| Polk .....                | .....                        | .....                                     | do .....                     |
| Pomeroy .....             | Brightwood avenue .....      | East .....                                | Asphalt, B. B. ....          |
| Portner place .....       | U and V .....                | Fourteenth and Fifteenth .....            | Asphalt block .....          |
| Potomac .....             | M .....                      | Prospect .....                            | Granite .....                |
| Do .....                  | do .....                     | do .....                                  | do .....                     |
| Do .....                  | Prospect .....               | O .....                                   | Asphalt, H. B. ....          |
| Princeton .....           | Thirtieth .....              | Fourteenth .....                          | Asphalt block .....          |
| Do .....                  | Brightwood avenue .....      | Thirtieth .....                           | Gravel .....                 |
| Providence .....          | Ninth .....                  | do .....                                  | Macadam .....                |
| Q, NW .....               | Third .....                  | New Jersey avenue .....                   | Asphalt, B. B. ....          |
| Do .....                  | New Jersey avenue .....      | Fifth .....                               | Coal tar .....               |
| Do .....                  | Fifth .....                  | Sixth .....                               | Asphalt, B. B. ....          |
| Do .....                  | Sixth .....                  | Rhode Island avenue .....                 | Coal tar .....               |
| Do .....                  | Rhode Island avenue .....    | Vermont avenue .....                      | Asphalt, H. B. ....          |
| Do .....                  | Fourteenth .....             | Sixteenth .....                           | Coal tar .....               |
| Do .....                  | .....                        | .....                                     | do .....                     |
| Do .....                  | Sixteenth .....              | Seventeenth .....                         | Asphalt, B. B. ....          |
| Do .....                  | Seventeenth .....            | Nineteenth .....                          | Coal tar .....               |
| Do .....                  | Nineteenth .....             | Twentieth .....                           | Coal tar .....               |
| Do .....                  | Twentieth .....              | Twenty-first .....                        | do .....                     |
| Do .....                  | Massachusetts avenue .....   | Twenty-second .....                       | do .....                     |
| Do .....                  | do .....                     | Twenty-first .....                        | do .....                     |
| Do .....                  | Twenty-eighth .....          | Thirtieth .....                           | Asphalt, B. B. ....          |
| Do .....                  | Thirtieth .....              | Valley .....                              | Coal tar .....               |
| Do .....                  | Valley .....                 | Thirty-second .....                       | do .....                     |
| Do .....                  | Thirty-second .....          | Thirty-fifth .....                        | Asphalt, B. B. ....          |
| Q, NE .....               | Lincoln avenue .....         | Eckington place .....                     | Asphalt, H. B. ....          |
| Quarry road .....         | Columbia road .....          | Zoo Park .....                            | Macadam .....                |
| Queen's Chapel road ..... | .....                        | .....                                     | Gravel .....                 |
| Quincy .....              | Lincoln avenue .....         | Eckington place .....                     | Asphalt, H. B. ....          |
| Do .....                  | Third, E .....               | Eckington line .....                      | do .....                     |
| Do .....                  | Brightwood avenue east ..... | .....                                     | Macadam .....                |
| Do .....                  | .....                        | .....                                     | do .....                     |
| R, NW .....               | Florida avenue .....         | Lincoln avenue .....                      | Asphalt, B. B. ....          |
| Do .....                  | do .....                     | .....                                     | Asphalt, H. B. ....          |
| Do .....                  | Seventh .....                | Seventh .....                             | do .....                     |
| Do .....                  | Ninth .....                  | Ninth .....                               | Coal tar .....               |
| Do .....                  | Fourteenth .....             | Fourteenth .....                          | Asphalt, H. B. ....          |
| Do .....                  | .....                        | Sixteenth .....                           | Coal tar .....               |
| Do .....                  | Sixteenth .....              | New Hampshire avenue .....                | Asphalt, B. B. ....          |
| Do .....                  | New Hampshire avenue .....   | Twentieth .....                           | Asphalt, H. B. ....          |
| Do .....                  | Connecticut avenue .....     | Twenty-first .....                        | Coal tar .....               |
| Do .....                  | Twenty-first .....           | Florida avenue .....                      | Asphalt, H. B. ....          |
| Do .....                  | Florida avenue .....         | Massachusetts avenue .....                | Gravel .....                 |
| Do .....                  | .....                        | .....                                     | do .....                     |
| Do .....                  | Thirty-second .....          | Thirty-fourth .....                       | Asphalt block .....          |
| Do .....                  | Thirty-fourth .....          | Thirty-fifth .....                        | do .....                     |
| R, NE .....               | Lincoln avenue .....         | Fourth .....                              | Asphalt .....                |
| Do .....                  | Fourth .....                 | Brightwood road .....                     | Asphalt, H. B. ....          |
| Randolph .....            | North Capitol .....          | First .....                               | Macadam .....                |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks. |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|----------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |          |
| 1901       | 2,287         | \$1.79                 | \$5,747.00     |             | 0                     | 0                                            | 0                  | 0             |          |
| 1890       | 25,627        | .55                    | 28,707.00      |             |                       |                                              |                    |               |          |
| 1896       | 1,164         |                        |                |             | 0                     | 0                                            | 0                  | 0             |          |
|            | 3,300         |                        |                |             |                       |                                              |                    |               |          |
| 1889       | 5,535         | 2.00                   | 16,078.00      |             |                       | \$0.0005                                     |                    | \$0.0025      |          |
| 1873       | 2,154         | 3.20                   | 6,993.00       | 1886        | \$1.65                | .033                                         | \$0.045            | 0             |          |
| 1892       | 1,366         | 2.00                   | 4,521.00       |             | 0                     | 0                                            | 0                  | 0             |          |
|            | 4,000         |                        |                |             |                       |                                              |                    |               |          |
|            | 4,000         |                        |                |             |                       |                                              |                    |               |          |
| 1898       | 1,400         |                        |                |             |                       |                                              |                    |               |          |
| 1889       | 2,560         | 2.00                   | 7,692.00       |             |                       | .005                                         |                    | 0             |          |
| 1888       | 1,025         |                        |                |             |                       |                                              |                    |               |          |
| 1884       | 664           |                        | 1,852.00       |             |                       |                                              |                    |               |          |
| 1879       | 389           | 1.93                   | 788.00         |             |                       |                                              |                    |               |          |
| 1884       | 1,840         | 2.25                   | 4,332.00       |             |                       | .07                                          |                    | .071          |          |
| 1897       | 2,333         | 1.77                   | 4,717.00       |             |                       |                                              |                    |               |          |
| 1897       | 6,300         |                        |                |             |                       |                                              |                    |               |          |
| 1900       | 4,426         |                        |                |             |                       |                                              |                    |               |          |
| 1890       | 1,812         | 2.00                   | 6,518.00       |             | 0                     | 0                                            | 0                  | 0             |          |
| 1888       | 2,031         | 2.00                   | 4,870.00       |             |                       | .022                                         |                    | .05           |          |
| 1890       | 833           | 2.00                   | 2,088.00       |             |                       | .009                                         |                    | 0             |          |
| 1887       | 4,758         | 1.98                   | 13,030.00      | { 1896      | .73                   | .054                                         |                    | 0             |          |
|            |               |                        |                | { 1900      | 1.126                 |                                              | .123               | 0             |          |
| 1883       | 2,806         | 2.25                   | 6,452.00       |             |                       | .034                                         |                    | .094          |          |
| 1874       | 4,806         | 3.20                   | 15,378.00      | { 1886      | .705                  | .006                                         | .065               | 0             |          |
|            |               |                        |                | { 1892      | .57                   |                                              | .013               | 0             |          |
| 1875       | 2,301         | 3.00                   | 6,903.00       | 1895        | 1.415                 | .027                                         | .104               |               |          |
| 1888       | 4,904         | 2.00                   | 10,744.00      |             |                       | .022                                         |                    | .017          |          |
| 1873       | 862           | 3.20                   | 2,760.00       | { 1882      | .715                  | .08                                          | .009               | 0             |          |
|            |               |                        |                | { 1888      | 1.40                  |                                              | .06                | 0             |          |
| 1886       | 2,541         | 1.97                   | 5,632.00       | 1900        | 1.336                 | .044                                         |                    | .017          |          |
| 1875       | 883           | 3.00                   | 2,649.00       |             |                       | .013                                         |                    | .193          |          |
| 1889       | 2,000         | 2.00                   | 6,608.00       |             |                       | .0015                                        |                    | 0             |          |
| 1887       | 3,943         | 1.98                   | 11,551.00      |             |                       | .007                                         |                    | 0             |          |
| 1887       | 1,067         | 1.98                   | 3,884.00       |             |                       | .026                                         |                    | 0             |          |
| 1891       | 4,002         | 2.00                   | 16,136.00      |             | 0                     | 0                                            | 0                  | 0             |          |
| 1893       | 3,933         | 2.25                   | 12,786.00      |             | 0                     | 0                                            | 0                  | 0             |          |
|            | 3,500         |                        |                |             |                       |                                              |                    |               |          |
|            | 18,000        |                        |                |             |                       |                                              |                    |               |          |
| 1891       | 3,670         | 2.25                   | 11,580.00      |             | 0                     | 0                                            | 0                  | 0             |          |
| 1892       | 919           | 2.25                   | 3,245.00       |             | 0                     | 0                                            | 0                  | 0             |          |
| 1901       | 2,013         |                        |                |             |                       |                                              |                    |               |          |
| 1890       | 3,051         | 2.00                   | 14,776.00      |             |                       | .009                                         |                    | 0             |          |
| 1890       | 2,040         | 2.25                   |                |             |                       |                                              |                    |               |          |
| 1890       | 8,483         | 2.25                   | 29,713.00      |             | 0                     | 0                                            | 0                  | 0             |          |
| 1888       | 1,602         | 2.00                   | 4,062.00       |             |                       | .035                                         |                    |               |          |
| 1884       | 7,638         | 2.25                   | 17,249.00      |             |                       | .037                                         |                    | .074          |          |
| 1875       | 4,502         | 3.00                   | 13,507.00      | 1896        | 1.99                  | .01                                          |                    | 0             |          |
| 1890       | 4,155         | 2.00                   | 14,873.00      |             |                       | .0013                                        |                    | 0             |          |
| 1891       | 3,498         | 2.25                   | 12,258.00      |             | 0                     | 0                                            | 0                  | 0             |          |
| 1887       | 1,411         | 1.98                   | 3,583.00       |             |                       | .051                                         |                    | 0             |          |
| 1892       | 733           | 2.25                   | 2,248.00       |             | 0                     | 0                                            | 0                  | 0             |          |
|            | 2,100         |                        |                |             |                       |                                              |                    |               |          |
| 1900       | 2,114         | 1.77                   | 5,618.00       |             |                       |                                              |                    |               |          |
| 1890       | 995           | 1.77                   | 2,681.00       |             |                       |                                              |                    |               |          |
|            | 8,555         |                        |                |             |                       | .01                                          |                    | .04           |          |
| 1890       | 2,321         | 2.25                   | 6,993.00       |             | 0                     | 0                                            | 0                  | 0             |          |
|            | 2,700         |                        |                |             |                       |                                              |                    |               |          |

Private expense.  
Permit work.

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                 | From—                 | To—                                  | Kind of pavement or roadway. |
|-------------------------|-----------------------|--------------------------------------|------------------------------|
| Randolph                | Second, E             | Fourth                               | Asphalt                      |
| Rhode Island avenue     | New Jersey avenue     | Florida avenue, east                 | Asphalt, H. B.               |
| Do                      | do                    | Fifth                                | Asphalt, H. B.               |
| Do                      | Fifth                 | Ninth                                | Asphalt, H. B.               |
| Do                      | Ninth                 | Thirteenth                           | do                           |
| Do                      | Thirteenth            | Sixteenth                            | do                           |
| Do                      | Around Scott square.  |                                      | Coal tar                     |
| Do                      | Sixteenth             | Connecticut avenue                   | do                           |
| Ridge                   | M and N               | Fourth and Fifth                     | Asphalt, B. B.               |
| Ridge road              |                       |                                      | Gravel                       |
| Riggs                   | R and S               | Thirteenth and Fourteenth.           | Asphalt block                |
| Do                      | do                    | Sixteenth and Seventeenth.           | Asphalt, H. B.               |
| Do                      | do                    | New Hampshire avenue and Nineteenth. | do                           |
| Robinson                | L and M               | Sixth and Water                      | Gravel                       |
| Rock Creek Church road. |                       |                                      | Macadam                      |
| Do                      |                       |                                      | Gravel                       |
| S, NW                   | North Capitol         | First                                | Macadam                      |
| Do                      | Florida avenue        | Seventh                              | Asphalt, H. B.               |
| Do                      | Seventh               | Eleventh                             | Coal tar                     |
| Do                      | Eleventh              | Fourteenth                           | do                           |
| Do                      | Fourteenth            | Sixteenth                            | do                           |
| Do                      | Sixteenth             | New Hampshire avenue                 | Asphalt, B. B.               |
| Do                      | New Hampshire avenue. | Twentieth                            | Asphalt, H. B.               |
| Do                      | Twentieth             | Connecticut avenue                   | Asphalt, B. B.               |
| Do                      | Florida avenue        | Phelps place                         | do                           |
| Do                      | Phelps place          | Twenty-third                         | Asphalt, H. B.               |
| S, NE                   | Second                | Brentwood road                       | Asphalt                      |
| Seaton, NE              | do                    | Fourth                               | do                           |
| Do                      | Sixth                 | Brentwood road                       | do                           |
| Seaton, NW              | North Capitol         | First                                | Macadam                      |
| Sampson                 | P and Q               | Fourteenth and Fifteenth             | Asphalt, B. B.               |
| Sargent road            |                       |                                      | Gravel                       |
| School                  | D and E               | Four-and-a-half and Sixth.           |                              |
| Do                      | Park                  | Grant                                | Macadam                      |
| Sheridan                |                       |                                      | do                           |
| Sherman                 |                       |                                      | do                           |
| Spruce and Bohrer       | Florida avenue        | Larch                                | Asphalt, H. B.               |
| Spruce                  | Larch                 | Harewood                             | do                           |
| Spring                  | Morris road           | Arthur                               | Gravel                       |
| Steuben                 | Brightwood avenue     | Sherman                              | Macadam                      |
| Stoughton               | Fourteenth            | Alley west of Fourteenth.            | Asphalt block                |
| Do                      | Alley                 | Westward                             | Granite                      |
| Do                      | West to               | Fifteenth.                           | Asphalt, B. B.               |
| Sunderland place        | N and O               | Nineteenth and Twentieth             | Asphalt block                |
| Superior                | Champlain             | Sixteenth                            | Gravel                       |
| T, NW                   | Florida avenue        | Seventh                              | Asphalt, H. B.               |
| Do                      | Seventh               | Ninth                                | do                           |
| Do                      | Ninth                 | Tenth                                | do                           |
| Do                      | Tenth                 | Fourteenth                           | do                           |
| Do                      | Fourteenth            | New Hampshire avenue                 | do                           |
| Do                      | New Hampshire avenue. | Florida avenue                       | Macadam                      |
| Do                      | Second                | Eckington line                       | Asphalt, B. B.               |
| Tenleytown road         |                       |                                      | Macadam                      |
| Tennessee avenue        | East Capitol          | B                                    | Asphalt, H. B.               |
| Do                      | B                     | D                                    | Gravel                       |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.         |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                  |
|            | 2,000         |                        |                |             | 0                     | 0                                            | 0                  | \$0.011       |                  |
| 1897       | 1,146         | \$1.54                 | \$2,560.00     |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1888       | 2,313         | 2.00                   | 5,459.00       |             |                       | \$0.011                                      |                    | .023          |                  |
| 1883       | 8,120         |                        |                |             |                       | .048                                         |                    | .041          |                  |
| 1882       | 9,219         | 2.26                   | 21,077.00      |             |                       | .026                                         |                    | 0             | Private expense. |
| 1881       | 7,723         | 1.84                   | 14,574.00      |             |                       | .045                                         |                    | .005          |                  |
| 1873       | 12,600        | 3.20                   | 40,319.00      | 1888        | \$0.83                | .03                                          | \$0.0071           |               |                  |
|            |               |                        |                | 1900        | 1.017                 |                                              | 0                  | 0             |                  |
|            |               |                        |                | 1878        | 1.35                  |                                              | .025               |               |                  |
| 1873       | 5,411         | 3.20                   | 17,314.00      | 1893        | .742                  |                                              | .146               |               |                  |
| 1889       | 2,518         | 2.00                   | 9,553.00       | 1895        | 1.60                  |                                              | .0014              | .0013         |                  |
|            | 15,000        |                        |                |             | 0                     |                                              | .0016              | 0             |                  |
| 1886       | 2,630         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1891       | 1,620         | 2.25                   | 5,079.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1896       | 2,555         | 1.63                   | 5,508.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 950           |                        |                |             |                       |                                              |                    |               |                  |
|            | 20,000        |                        |                |             |                       |                                              |                    |               |                  |
|            | 13,000        |                        |                |             |                       |                                              |                    |               |                  |
|            | 3,000         |                        |                |             |                       |                                              |                    |               |                  |
| 1894       | 4,539         | 2.10                   | 11,937.00      |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1889       | 5,058         | 2.00                   | 14,526.90      | 1901        | 1.13                  | .011                                         | 0                  | 0             |                  |
| 1875       | 5,135         | 3.00                   | 15,405.00      | 1892        | 1.045                 | .02                                          | 0                  | 0             |                  |
|            |               |                        |                | 1900        | .44                   | .045                                         |                    |               |                  |
| 1873       | 4,214         | 3.20                   | 13,485.00      | 1889        | .55                   | .023                                         | .051               |               |                  |
| 1889       | 2,681         | 2.00                   | 5,734.00       | 1894        | .893                  |                                              | .036               | .009          |                  |
| 1894       | 5,004         | 2.10                   | 14,295.00      |             | 0                     | 0                                            | 0                  | .07           |                  |
| 1890       | 1,077         | 2.00                   | 3,647.00       |             | 0                     | 0                                            | 0                  | .017          |                  |
| 1895       | 1,037         | 2.00                   |                |             | 0                     | 0                                            | 0                  | 0             | Do.              |
| 1901       | 2,681         | 1.795                  | 6,014.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 5,800         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 2,800         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 1,000         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 2,600         |                        |                |             |                       |                                              |                    |               |                  |
| 1890       | 1,733         |                        |                |             |                       | .0016                                        |                    | .0006         |                  |
|            | 9,000         |                        |                |             |                       |                                              |                    |               |                  |
|            | 2,000         |                        |                |             |                       |                                              |                    |               |                  |
|            | 2,000         |                        |                |             |                       |                                              |                    |               |                  |
|            | 2,700         |                        |                |             |                       |                                              |                    |               |                  |
| 20,000     |               |                        |                |             |                       |                                              |                    |               |                  |
| 1897       | 2,319         | 1.561                  | 6,403.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1900       | 2,064         | 1.80                   | 4,209.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 1,600         |                        |                |             |                       |                                              |                    |               |                  |
| 1893       | 2,712         | 1.05                   | 4,923.00       |             |                       |                                              |                    |               |                  |
| 1888       | 483           |                        |                |             |                       |                                              |                    |               | Permit work.     |
| 1889       | 755           |                        |                |             |                       |                                              |                    |               |                  |
| 1889       | 1,069         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1885       | 1,185         |                        |                |             |                       |                                              |                    |               | Do.              |
| 1895       | 5,800         |                        |                |             |                       |                                              |                    |               |                  |
| 1897       | 1,332         | 1.56                   | 3,317.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1896       | 1,556         | 1.63                   | 3,760.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1891       | 1,706         | 2.25                   | 5,210.00       |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1892       | 5,256         | 2.00                   | 16,805.00      |             | 0                     | 0                                            | 0                  | 0             |                  |
| 1895       | 5,146         | 1.68                   | 13,990.00      |             | 0                     | 0                                            | 0                  | 0             |                  |
|            | 5,300         |                        |                |             |                       |                                              |                    |               |                  |
|            | 6,800         |                        |                |             | 0                     | 0                                            | 0                  | .023          | Private expense. |
|            | 48,700        |                        |                |             |                       |                                              |                    |               |                  |
| 1899       | 2,713         | 1.76                   | 6,718.00       |             |                       |                                              |                    |               |                  |
|            | 4,500         |                        |                |             |                       |                                              |                    |               |                  |

TABLE D.—*Descriptive list of street pavements and suburban roadways.*

| Street.                   | From—                             | To—                               | Kind of pavement or roadway. |
|---------------------------|-----------------------------------|-----------------------------------|------------------------------|
| Thomas .....              | Sixth .....                       | Eckington line. ....              | Asphalt, B. B. ....          |
| Trinidad .....            | King's subdivision. ....          | .....                             | Macadam .....                |
| Tunlaw road .....         | .....                             | .....                             | Gravel .....                 |
| U, NW .....               | Le Droit (Second) eastward. ....  | .....                             | Asphalt block .....          |
| Do. ....                  | Ninth .....                       | Tenth .....                       | Asphalt, H. B. ....          |
| Do. ....                  | Tenth .....                       | Fourteenth .....                  | do .....                     |
| Do. ....                  | Fourteenth .....                  | Sixteenth .....                   | do .....                     |
| Do. ....                  | Sixteenth .....                   | Eighteenth .....                  | do .....                     |
| Do. ....                  | Twenty-eighth .....               | Thirty-first .....                | Macadam .....                |
| Do. ....                  | Thirty-first .....                | Thirty-second .....               | Asphalt, H. B. ....          |
| Do. ....                  | Thirty-second .....               | Thirty-fifth .....                | do .....                     |
| Union .....               | M and O .....                     | Four-and-a-half and Sixth .....   | Cobble .....                 |
| University place .....    | Welling .....                     | Huntington .....                  | Asphalt, H. B. ....          |
| V, NW .....               | Thirteenth .....                  | Fourteenth .....                  | do .....                     |
| Do. ....                  | Fourteenth .....                  | Fifteenth .....                   | do .....                     |
| Valley .....              | P .....                           | U .....                           | Asphalt block .....          |
| Van .....                 | Third .....                       | Four-and-a-half .....             | do .....                     |
| Vermilion .....           | Piney Branch road .....           | Baltimore and Ohio R. R. ....     | Gravel .....                 |
| Vernon .....              | Eighteenth .....                  | Nineteenth .....                  | Asphalt, B. B. ....          |
| Virginia avenue, NW ..... | Intersection of B. ....           | .....                             | Asphalt, H. B. ....          |
| Do .....                  | E .....                           | G .....                           | do .....                     |
| Do .....                  | G .....                           | Twenty-seventh .....              | Gravel .....                 |
| Virginia avenue, SE ..... | Second .....                      | Third .....                       | Macadam .....                |
| Do .....                  | Third .....                       | Eleventh .....                    | Gravel .....                 |
| Virginia avenue, SW ..... | South Capitol .....               | Delaware avenue .....             | Asphalt, H. B. ....          |
| Do .....                  | Second .....                      | Four-and-a-half .....             | Gravel .....                 |
| Do .....                  | Four-and-a-half .....             | Seventh .....                     | do .....                     |
| Do .....                  | Ninth .....                       | Twelfth .....                     | Granite .....                |
| Vermont avenue .....      | H .....                           | I .....                           | do .....                     |
| Do .....                  | K .....                           | M .....                           | Coal tar .....               |
| Do .....                  | .....                             | .....                             | do .....                     |
| Do .....                  | M .....                           | P .....                           | do .....                     |
| Do .....                  | P .....                           | R .....                           | Asphalt, H. B. ....          |
| Do .....                  | R .....                           | T .....                           | Macadam .....                |
| Do .....                  | Intersection of N. ....           | .....                             | Asphalt, B. B. ....          |
| Do .....                  | T .....                           | Florida avenue .....              | Gravel .....                 |
| W, NW .....               | Twelfth .....                     | Thirteenth .....                  | Asphalt, H. B. ....          |
| Do .....                  | Thirteenth .....                  | Fifteenth .....                   | do .....                     |
| Wallach .....             | T and U .....                     | Thirteenth and Fourteenth .....   | Asphalt block .....          |
| Ward place .....          | M and N .....                     | New Haven and Twenty-second ..... | Asphalt, B. B. ....          |
| Washington .....          | G and H .....                     | Fourth and Fifth .....            | do .....                     |
| Do .....                  | Nichols avenue .....              | Taylor .....                      | Gravel .....                 |
| Water .....               | Seventh .....                     | Twelfth .....                     | Granite .....                |
| Do .....                  | N .....                           | O .....                           | do .....                     |
| Do .....                  | M .....                           | Sixth .....                       | do .....                     |
| Water (south side) .....  | .....                             | P, westward .....                 | Vitrified block .....        |
| Water .....               | Twelfth .....                     | Thirteen-and-a-half .....         | Granite .....                |
| Welling .....             | Fourteenth .....                  | University place .....            | Asphalt, H. B. ....          |
| Whitney avenue .....      | do .....                          | Brightwood avenue .....           | Macadam .....                |
| Do .....                  | Brightwood avenue, eastward. .... | .....                             | do .....                     |
| Willard .....             | T and U .....                     | Seventeenth and Eighteenth .....  | Gravel .....                 |
| Westminster .....         | S and T .....                     | Ninth and Tenth .....             | Asphalt, B. B. ....          |
| Wyoming .....             | Eighteenth .....                  | Columbia road .....               | do .....                     |
| Do .....                  | Columbia road, westward. ....     | .....                             | do .....                     |
| One-half, SE .....        | I .....                           | N .....                           | Macadam .....                |
| One-half, SW .....        | G .....                           | do .....                          | do .....                     |



with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.                 |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|--------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                          |
| 1901       | 2,000         |                        |                |             |                       |                                              |                    |               |                          |
|            | 3,205         |                        |                |             |                       |                                              |                    |               |                          |
|            | 11,000        |                        |                |             |                       |                                              |                    |               |                          |
| 1895       | 1,667         | \$1.78                 | \$3,024.00     |             |                       |                                              |                    |               |                          |
| 1891       | 2,547         | 2.25                   | 8,456.00       |             |                       | \$0.01                                       |                    | \$0.0036      |                          |
| 1893       | 4,808         | 2.25                   | 16,737.00      |             | 0                     | 0                                            | 0                  | 0             |                          |
| 1894       |               | 2.18 <sup>1</sup>      |                |             |                       |                                              |                    |               |                          |
| 1891       |               | 2.25                   | 12,762.00      |             |                       | .002                                         |                    | 0             |                          |
| 1896       |               | 1.83                   | 10,742.00      |             | 0                     | 0                                            | 0                  | 0             |                          |
|            | 2,900         | 1.63                   |                |             |                       |                                              |                    |               |                          |
|            | 5,700         |                        |                |             |                       |                                              |                    |               |                          |
| 1895       | 4,226         | 1.94                   | 11,415.00      |             | 0                     | 0                                            | 0                  | 0             | 4-inch base.             |
| 1894       | 2,371         | 1.93 <sup>1</sup>      | 8,262.00       |             | 0                     | 0                                            | 0                  | 0             | Do.                      |
|            | 5,333         |                        |                |             |                       |                                              |                    |               |                          |
| 1900       | 1,957         | 1.77                   | 4,818.00       |             | 0                     | 0                                            | 0                  | 0             |                          |
| 1894       | 2,128         | 1.53                   | 10,891.00      |             | 0                     | 0                                            | 0                  | 0             | { 4-inch hydraulic base. |
| 1894       | 2,415         | 1.68                   |                |             |                       |                                              |                    |               |                          |
| 1895       | 3,849         | 1.78                   | 8,625.00       |             |                       |                                              |                    |               |                          |
| 1898       | 1,177         | 1.77                   | 3,335.00       |             |                       |                                              |                    |               |                          |
|            | 4,000         |                        |                |             |                       |                                              |                    |               |                          |
|            | 1,886         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                          |
| 1900       | 443           | 1.69                   | 1,439.00       |             | 0                     | 0                                            | 0                  | 0             |                          |
| 1895       | 397           | 1.94                   | 19,998.00      |             | 0                     | 0                                            | 0                  | 0             |                          |
|            |               | 2.19                   |                |             |                       |                                              |                    |               |                          |
|            | 8,327         |                        |                |             |                       |                                              |                    |               |                          |
|            | 7,200         |                        |                |             |                       |                                              |                    |               |                          |
| 1880       | 1,926         | .75                    | 3,396.00       |             |                       |                                              |                    |               |                          |
| 1888       | 16,894        |                        | 12,383.00      |             |                       |                                              |                    |               |                          |
| 1897       | 1,850         | 1.56                   | 4,363.00       |             | 0                     | 0                                            | 0                  | 0             |                          |
|            | 5,000         |                        |                |             |                       |                                              |                    |               |                          |
|            | 2,500         |                        |                |             |                       |                                              |                    |               |                          |
|            | 2,500         |                        |                |             |                       |                                              |                    |               |                          |
| 1881       | 3,836         | 2.31                   | 11,769.00      | 1880        | \$1.175               | .0006                                        |                    | .0025         |                          |
|            | 4,156         |                        |                | 1878        |                       |                                              | \$0.019            |               |                          |
| 1872       | 6,536         | 3.20                   | 20,917.00      | 1882        | 1.14                  |                                              | .027               |               |                          |
|            |               |                        |                | 1894        | .25                   |                                              | .036               | .012          |                          |
| 1873       | 6,150         | 3.20                   | 19,679.00      | 1893        | 1.34                  | .026                                         | .014               | .011          |                          |
| 1881       | 6,103         | 2.00                   | 16,374.00      |             |                       | .039                                         |                    | .069          |                          |
| 1885       | 4,854         | .40                    | 5,951.00       |             |                       |                                              |                    |               |                          |
| 1878       | 338           | 1.78                   | 602.00         |             | 0                     | 0                                            | 0                  | 0             |                          |
|            | 5,500         |                        |                |             |                       |                                              |                    |               |                          |
| 1896       | 1,358         | 1.63                   | 3,381.75       |             | 0                     | 0                                            | 0                  | 0             |                          |
| 1900       | 4,368         | 1.80                   | 11,046.00      |             | 0                     | 0                                            | 0                  | 0             |                          |
| 1886       | 2,075         |                        |                |             |                       |                                              |                    |               |                          |
| 1892       | 1,505         | 2.00                   | 4,148.00       |             | 0                     | 0                                            | 0                  | 0             |                          |
| 1889       | 2,128         | 2.00                   | 8,159.00       |             |                       |                                              |                    |               |                          |
|            | 7,000         |                        |                |             | 0                     | .014                                         | 0                  | 0             |                          |
| 1872       | 16,858        |                        | 52,260         |             |                       |                                              |                    |               |                          |
| 1876       | 3,339         |                        | 11,758         |             |                       |                                              |                    |               |                          |
| 1884       | 3,526         |                        | 16,846         |             |                       |                                              |                    |               |                          |
| 1899       | 2,943         |                        | 4,095          |             |                       |                                              |                    |               |                          |
| 1880       | 3,110         |                        | 4,826          |             |                       |                                              |                    |               |                          |
| 1892       | 1,781         | 2.25                   | 4,483          |             | 0                     | 0                                            | 0                  | 0             |                          |
|            | 7,000         |                        |                |             |                       |                                              |                    |               |                          |
|            | 5,000         |                        |                |             |                       |                                              |                    |               |                          |
|            | 2,000         |                        |                |             |                       |                                              |                    |               |                          |
| 1892       | 1,749         | 2.00                   |                |             | 0                     | 0                                            | 0                  | 0             |                          |
|            | 2,566         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                          |
|            | 3,900         |                        |                |             |                       |                                              |                    |               |                          |
| 1901       | 6,000         |                        |                |             |                       |                                              |                    |               |                          |
| 1901       | 6,516         |                        |                |             |                       |                                              |                    |               |                          |

<sup>1</sup> Eight-inch base.

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                   | From—                      | To—                       | Kind of pavement or roadway. |
|---------------------------|----------------------------|---------------------------|------------------------------|
| First, NW .....           | Maryland avenue .....      | Pennsylvania avenue ..... | Asphalt, H. B. ....          |
| Do. ....                  | Pennsylvania avenue .....  | F .....                   | Granite .....                |
| Do. ....                  | B .....                    | C .....                   | Asphalt block .....          |
| Do. ....                  | do .....                   | do .....                  | Vitrified block .....        |
| Do. ....                  | Massachusetts avenue ..... | H .....                   | do .....                     |
| Do. ....                  | H .....                    | Defrees .....             | Asphalt .....                |
| Do. ....                  | Defrees .....              | I .....                   | Granite .....                |
| Do. ....                  | I .....                    | K .....                   | Asphalt, B. B. ....          |
| Do. ....                  | K .....                    | Pierce .....              | Asphalt, H. B. ....          |
| Do. ....                  | Pierce .....               | New York avenue .....     | do .....                     |
| Do. ....                  | New York avenue .....      | O .....                   | do .....                     |
| Do. ....                  | Q .....                    | P .....                   | do .....                     |
| Do. ....                  | O .....                    | Florida avenue .....      | do .....                     |
| Do. ....                  | Florida avenue .....       | S .....                   | Asphalt .....                |
| Do. ....                  | S .....                    | W .....                   | do .....                     |
| Do. ....                  | W .....                    | Michigan avenue .....     | do .....                     |
| First, E. ....            | B, North .....             | B, South .....            | do .....                     |
| First, NE .....           | B .....                    | C .....                   | Asphalt, H. B. ....          |
| Do. ....                  | C .....                    | F .....                   | Asphalt, B. B. ....          |
| Do. ....                  | F .....                    | L .....                   | Gravel .....                 |
| Do. ....                  | Q .....                    | R .....                   | Asphalt, H. B. ....          |
| Do. ....                  | R .....                    | Alley .....               | do .....                     |
| First, SE .....           | B .....                    | C .....                   | Granite .....                |
| Do. ....                  | C .....                    | D .....                   | Asphalt block .....          |
| Do. ....                  | D .....                    | E .....                   | Asphalt, H. B. ....          |
| Do. ....                  | E .....                    | G .....                   | Asphalt block .....          |
| Do. ....                  | I .....                    | River .....               | Gravel .....                 |
| First, SW .....           | Maryland avenue .....      | Virginia avenue .....     | Trap .....                   |
| Do. ....                  | Virginia avenue .....      | M .....                   | do .....                     |
| Do. ....                  | M .....                    | N .....                   | Rubble .....                 |
| Do. ....                  | N .....                    | River .....               | Gravel .....                 |
| Second, NW .....          | Pennsylvania avenue .....  | Indiana avenue .....      | Granite .....                |
| Do. ....                  | Indiana avenue .....       | I .....                   | Asphalt, H. B. ....          |
| Second (Le Droit avenue), | Florida avenue .....       | W .....                   | do .....                     |
| Second, NE. and SE. ....  | Pennsylvania avenue .....  | Maryland avenue .....     | do .....                     |
| Second, NE .....          | Maryland avenue .....      | C .....                   | Asphalt block .....          |
| Do. ....                  | C .....                    | F .....                   | do .....                     |
| Do. ....                  | F .....                    | H .....                   | Asphalt, B. B. ....          |
| Do. ....                  | K .....                    | L .....                   | Gravel .....                 |
| Do. ....                  | R .....                    | T .....                   | Asphalt, B. B. ....          |
| Second, SE .....          | Pennsylvania avenue .....  | D .....                   | Asphalt, H. B. ....          |
| Do. ....                  | D .....                    | G .....                   | Macadam .....                |
| Do. ....                  | Virginia avenue .....      | I .....                   | do .....                     |
| Do. ....                  | K .....                    | L .....                   | do .....                     |
| Second, SW .....          | Maryland avenue .....      | C .....                   | Asphalt, H. B. ....          |
| Do. ....                  | C .....                    | Virginia avenue .....     | Asphalt, B. B. ....          |
| Do. ....                  | Virginia avenue .....      | F .....                   | Asphalt, H. B. ....          |
| Do. ....                  | F .....                    | Delaware avenue .....     | Macadam .....                |
| Third, NW .....           | Pennsylvania avenue .....  | D .....                   | Granite .....                |
| Do. ....                  | Intersection of D. ....    | do .....                  | Asphalt, H. B. ....          |
| Do. ....                  | D .....                    | L .....                   | Asphalt, B. B. ....          |
| Do. ....                  | L .....                    | New York avenue .....     | Asphalt, H. B. ....          |
| Do. ....                  | New Jersey avenue .....    | P .....                   | do .....                     |
| Do. ....                  | P .....                    | Q .....                   | do .....                     |
| Do. ....                  | Q .....                    | R .....                   | do .....                     |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                     |               | Remarks.                                                                                     |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|---------------------|---------------|----------------------------------------------------------------------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to re-surfacing.                       | Since re-surfacing. | Current year. |                                                                                              |
| 1883       | 4,540         | \$2.24                 | \$10,460.00    | 1896        | \$1.40                | \$0.048                                      | \$0.17              | \$0.031       |                                                                                              |
| 1879       | 7,280         | 1.87                   | 15,690.00      |             |                       |                                              |                     |               |                                                                                              |
| 1893       | 475           |                        |                |             |                       |                                              |                     |               |                                                                                              |
| 1893       | 577           |                        |                |             |                       |                                              |                     |               |                                                                                              |
| 1882       | 1,427         | 2.39                   | 3,519.00       |             |                       |                                              |                     |               |                                                                                              |
| 1877       | 700           | 1.98                   | 1,386.00       |             |                       | .023                                         |                     | .014          |                                                                                              |
| 1882       | 535           | 2.41                   | 1,310.00       |             |                       | .009                                         |                     | 0             |                                                                                              |
| 1890       | 1,191         | 2.00                   | 3,028.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1894       | 3,651         | 1.68                   | 7,457.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1899       | 1,731         | 1.76                   | 4,860.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1901       | 2,728         | 1.79½                  | 6,687.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1896       | 1,160         | 1.63                   | 2,172.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1901       | 1,077         | 1.795                  | 2,451.00       |             |                       |                                              |                     |               |                                                                                              |
| 1892       | 1,898         | 1.20                   | 3,411.00       |             |                       |                                              |                     | .013          | Macadam base.                                                                                |
| 1895       | 7,385         | 1.94                   | 15,577.00      |             | 0                     | 0                                            | 0                   | 0             | Four-inch base.                                                                              |
| 1893       | 10,432        |                        |                |             |                       |                                              |                     | .003          | Laid by property owners.                                                                     |
| 1873       | 8,822         |                        |                | 1897        |                       |                                              |                     |               | Originally laid with coal tar in 1873.                                                       |
|            |               |                        |                |             |                       |                                              |                     |               | Relaid with new pavement and asphalt surface in 1897. Includes entrances to Capitol grounds. |
| 1881       | 1,987         | 1.85                   | 3,736.00       |             |                       | .004                                         |                     | .006          |                                                                                              |
| 1891       | 5,616         | 2.00                   | 13,995.00      |             |                       | .0005                                        |                     | .0036         |                                                                                              |
|            | 4,500         |                        |                |             |                       |                                              |                     |               |                                                                                              |
| 1892       | 2,206         | 2.25                   | 7,358.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1892       | 538           | 2.25                   | 1,437.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1880       | 2,152         | 1.81                   | 3,935.00       |             |                       |                                              |                     |               |                                                                                              |
| 1889       | 1,290         | 2.00                   | 2,631.00       |             |                       |                                              |                     |               |                                                                                              |
| 1895       | 2,001         | 1.68                   | 3,960.00       |             |                       | .005                                         |                     |               |                                                                                              |
| 1900       | 1,652         | 1.77                   | 4,351.00       |             |                       |                                              |                     |               |                                                                                              |
|            | 10,200        |                        |                |             |                       |                                              |                     |               |                                                                                              |
| 1874       | 6,721         | 3.50                   | 23,524.00      |             |                       |                                              |                     |               |                                                                                              |
| 1876       | 11,198        | 3.50                   | 39,194.00      |             |                       |                                              |                     |               |                                                                                              |
| 1876       | 2,315         | 1.05                   | 2,430.00       |             |                       |                                              |                     |               |                                                                                              |
|            | 13,750        |                        |                |             |                       |                                              |                     |               |                                                                                              |
| 1881       | 3,693         | 1.87                   | 7,137.00       |             |                       |                                              |                     | .028          |                                                                                              |
| 1881       | 10,452        | 2.08½                  | 22,534.00      |             |                       | .044                                         |                     | 0             | Permit work.                                                                                 |
| 1892       | 6,051         | 2.25                   | 18,454.00      |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1881       | 4,751         | 2.09                   | 10,589.00      | 1898        | 1.45                  | .028                                         | .018                | .028          |                                                                                              |
| 1887       | 1,846         | 1.98½                  | 4,787.00       |             |                       |                                              |                     |               |                                                                                              |
| 1894       | 4,323         | 2.00                   | 10,788.00      |             |                       |                                              |                     |               |                                                                                              |
| 1891       | 3,884         | 2.00                   | 7,595.00       |             |                       | .004                                         |                     | 0             |                                                                                              |
|            | 1,068         |                        |                |             |                       |                                              |                     |               |                                                                                              |
| 1890       | 4,214         | 2.00                   | 8,702.00       |             | 0                     | 0                                            | 0                   | 0             | Do.                                                                                          |
| 1882       | 4,906         | 2.27                   | 11,372.00      |             |                       | .035                                         |                     | .154          |                                                                                              |
| 1891       | 2,099         | .93                    | 4,835.00       |             |                       |                                              |                     |               |                                                                                              |
| 1892       | 1,206         | .95                    | 2,115.00       |             |                       |                                              |                     |               |                                                                                              |
| 1901       | 1,219         |                        |                |             |                       |                                              |                     |               |                                                                                              |
| 1892       | 2,532         | 2.25                   | 10,013.00      |             | 0                     | 0                                            | 0                   | .006          |                                                                                              |
| 1890       | 3,179         | 2.00                   | 12,335.00      |             |                       | .023                                         |                     | 0             |                                                                                              |
| 1891       | 511           | 2.25                   | 2,227.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1889       | 4,627         | .57                    | 5,171.00       |             |                       |                                              |                     |               |                                                                                              |
| 1880       | 4,231         | 1.72                   | 7,518.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1880       | 436           |                        | 800.00         |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1875       | 16,359        | 3.00                   | 52,631.00      | { 1883      | 1.42                  | .014                                         |                     |               |                                                                                              |
| 1879       | 2,685         | 1.78                   | 4,779.00       | { 1884      | .08                   |                                              | .03                 | .024          |                                                                                              |
| 1892       | 4,177         | 2.25                   | 12,358.00      |             |                       | .038                                         |                     | .028          |                                                                                              |
| 1899       | 2,077         | 1.80                   | 5,497.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |
| 1900       | 529           | 1.80                   | 1,796.00       |             | 0                     | 0                                            | 0                   | 0             |                                                                                              |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                       | From—                    | To—                      | Kind of pavement or roadway. |
|-------------------------------|--------------------------|--------------------------|------------------------------|
| Third, NW                     | R                        | Florida avenue           | Asphalt, H. B.               |
| Third, NW (Harewood avenue).  | Florida avenue           | Elm                      | Gravel                       |
| Third, NE                     | East Capitol             | Maryland avenue          | Asphalt, H. B.               |
| Do                            | Maryland avenue          | C                        | Asphalt block                |
| Do                            | C                        | F                        | Asphalt, B. B.               |
| Do                            | F                        | H                        | Asphalt, H. B.               |
| Do                            | Quincy                   | R                        | do                           |
| Do                            | R                        | T                        | Asphalt                      |
| Third, SE                     | East Capitol             | Pennsylvania avenue      | Asphalt, H. B.               |
| Do                            | Pennsylvania avenue      | C                        | Asphalt block                |
| Do                            | C                        | D                        | Granite                      |
| Do                            | D                        | Virginia avenue          | Belgian                      |
| Do                            | M                        | N                        | Rubble                       |
| Do                            | Virginia avenue          | K                        | Granite                      |
| Do                            | K                        | M                        | Macadam                      |
| Third, SW                     | Pennsylvania avenue      | B south                  | Granite                      |
| Do                            | B                        | Virginia avenue          | Asphalt, H. B.               |
| Do                            | Virginia avenue          | F                        | do                           |
| Do                            | F                        | H                        | do                           |
| Do                            | H                        | I                        | do                           |
| Do                            | I                        | K                        | do                           |
| Do                            | K                        | N                        | do                           |
| Fourth (John Marshall place). | Pennsylvania avenue      | D                        | Asphalt block                |
| Fourth, NW                    | do                       | Missouri avenue          | Asphalt, H. B.               |
| Do                            | Indiana avenue           | New York avenue          | Coal tar                     |
| Do                            | New York avenue          | New Jersey avenue        | Granite                      |
| Do                            | New Jersey avenue        | Florida avenue           | Asphalt, H. B.               |
| Fourth (Linden)               | Florida avenue           | Maple                    | do                           |
| Fourth, NW                    | Maple                    | College                  | Macadam                      |
| Fourth, NE                    | East Capitol             | Maryland avenue          | Asphalt block                |
| Do                            | Maryland avenue          | Massachusetts avenue     | do                           |
| Do                            | Massachusetts avenue     | D                        | do                           |
| Do                            | D                        | F                        | do                           |
| Do                            | F                        | H                        | Gravel                       |
| Do                            | H                        | K                        | Asphalt, H. B.               |
| Do                            | K                        | L                        | do                           |
| Do                            | Extension to L.          | M                        | Gravel                       |
| Do                            | L                        | Baltimore and Ohio R. R. | Asphalt, H. B.               |
| Do                            | R                        | Eckington line           | Asphalt                      |
| Do                            | Baltimore and Ohio R. R. | Eckington line           | Gravel                       |
| Do                            | Eckington line           | Bunker Hill road         | Asphalt                      |
| Fourth, SE                    | East Capitol             | Pennsylvania avenue      | Asphalt block                |
| Do                            | Pennsylvania avenue      | North Carolina avenue    | do                           |
| Do                            | North Carolina avenue    | Virginia avenue          | do                           |
| Do                            | Virginia avenue          | N                        | do                           |
| Four-and-a-half, SW           | Missouri avenue          | Maryland avenue          | Asphalt, B. B.               |
| Do                            | Maryland avenue          | H                        | Granite                      |
| Do                            | H                        | P                        | do                           |
| Fifth, NW                     | D                        | G                        | Asphalt, H. B.               |
| Do                            | F                        | do                       | do                           |
| Do                            | do                       | do                       | do                           |
| Do                            | do                       | do                       | do                           |
| Do                            | G                        | New York avenue          | Coal tar                     |
| Do                            | do                       | do                       | Asphalt, H. B.               |
| Do                            | New York avenue          | O                        | Asphalt, B. B.               |
| Do                            | O                        | Q                        | do                           |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards.  | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.              |
|------------|----------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|-----------------------|
|            |                |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                       |
| 1900       | 2,205<br>4,300 | \$1.795                | \$5,183        | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1884       | 3,121          | 2.25                   | 7,437          | -----       |                       | \$0.045                                      |                    | \$0.012       |                       |
| 1887       | 1,060          | 1.99                   | 2,977          | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1890       | 4,314          | 2.00                   | 10,850         | -----       |                       | .0018                                        |                    | .0013         |                       |
| 1891       | 3,834          | 2.25                   | 9,164          | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1892       | 1,133          | 2.25                   | 3,377          | -----       | 0                     | 0                                            | 0                  | 0             | Permit work.          |
|            | 3,000          |                        |                | -----       | 0                     | 0                                            | 0                  | 0             | Private expense.      |
| 1881       | 3,521          | 2.09                   | 7,791          | -----       |                       | .04                                          |                    | .085          |                       |
| 1887       | 987            | 1.99                   | 2,562          | -----       |                       |                                              |                    |               |                       |
| 1882       | 2,572          | 2.20                   | 5,690          | -----       |                       |                                              |                    |               |                       |
| 1876       | 5,030          | 3.50                   | 17,607         | -----       |                       |                                              |                    |               |                       |
| 1876       | 2,017          | 1.08                   | 9,400          | -----       |                       |                                              |                    |               |                       |
| 1890       | 2,467          |                        |                | -----       |                       |                                              |                    |               |                       |
|            | 2,000          |                        |                | -----       |                       |                                              |                    |               |                       |
| 1881       | 5,941          | 1.82                   | 11,008         | -----       |                       |                                              |                    |               |                       |
| 1884       | 5,800          | 2.25                   | 17,548         | 1901        | \$1.936               | .058                                         | 0                  | 0             |                       |
| 1885       | 2,088          | 2.25                   | 6,968          | -----       |                       | .032                                         |                    | .058          |                       |
| 1895       | 2,947          | 1.68                   | 5,460          | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1896       | 1,342          | 1.63                   | 2,699          | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1897       | 1,472          | 1.56                   | 3,087          | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1899       | 6,325          | 1.76                   | 13,598         | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1899       | 4,549          | 2.00                   | 14,669         | -----       |                       |                                              |                    |               |                       |
| 1888       | 2,287          |                        |                | -----       | 0                     | 0                                            | 0                  | 0             | In place of coal tar. |
| 1872       | 14,291         | 3.20                   | 45,732         | 1878        | 1.39                  | \$0.019                                      |                    |               |                       |
|            |                |                        |                | 1888        | .37                   | .014                                         |                    |               |                       |
|            |                |                        |                | 1891        | .325                  | .013                                         |                    | .0047         |                       |
| 1891       | 2,400          |                        |                | -----       |                       |                                              |                    |               |                       |
| 1891       | 4,594          | 2.25                   | 13,538         | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1891       | 2,145          | 2.25                   | 6,952          | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1892       |                |                        |                | -----       |                       |                                              |                    |               |                       |
| 1891       | 5,038          |                        |                | -----       |                       |                                              |                    |               |                       |
| 1893       | 2,537          |                        |                | -----       |                       |                                              |                    |               |                       |
| 1885       | 4,526          | 2.10                   | 10,228         | -----       |                       |                                              |                    |               |                       |
| 1887       | 1,912          | 2.00                   | 4,472          | -----       |                       |                                              |                    |               |                       |
| 1890       | 837            | 2.00                   | 1,972.00       | -----       |                       |                                              |                    |               |                       |
| 1901       | 3,101          | 1.77                   | 7,277.19       | -----       |                       |                                              |                    |               |                       |
|            | 3,620          |                        |                | -----       |                       |                                              |                    |               |                       |
| 1894       | 3,021          | 1.68                   | 6,120.00       | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1898       | 781            | 1.57                   | 2,455.00       | -----       | 0                     | 0                                            | 0                  | 0             |                       |
| 1899       | 1,067          | 1.76                   | 2,060.00       | -----       | 0                     | 0                                            | 0                  | 0             |                       |
|            | 2,400          |                        |                | -----       |                       |                                              |                    |               |                       |
| 1890       | 861            | 2.25                   | 2,867.00       | -----       | 0                     | 0                                            | 0                  | 0             | Permit work.          |
|            | 4,700          |                        |                | -----       | 0                     | 0                                            | 0                  | 0             | Private expense.      |
|            | 17,000         |                        |                | -----       |                       |                                              |                    |               |                       |
| 1897       | 4,152          |                        |                | -----       | 0                     | 0                                            | 0                  | 0             | On asphalt block.     |
| 1890       | 593            | 2.00                   | 1,389.00       | -----       |                       |                                              |                    |               |                       |
| 1898       | 6,684          | 1.77                   | 15,834.00      | -----       |                       |                                              |                    |               |                       |
| 1899       | 7,706          | 1.77                   | 18,630.00      | -----       |                       |                                              |                    |               |                       |
| 1890       | 4,833          | 2.00                   | 18,978.00      | -----       |                       | .041                                         |                    | .032          |                       |
| 1882       | 12,851         | 2.29                   | 30,527.00      | -----       |                       |                                              |                    |               |                       |
| 1889       | 14,566         | 1.68                   | 48,423.00      | -----       |                       |                                              |                    |               |                       |
| 1885       | 3,341          | 2.25                   | 11,592.00      | 1894        | .48                   | .02                                          | .036               |               |                       |
| 1894       | 380            | 2.18                   |                | 1895        | .38                   |                                              | .011               | .018          | Widening east side.   |
|            |                |                        |                |             | 0                     | 0                                            | 0                  | 0             |                       |
| 1900       | 200            |                        |                | -----       | 0                     | 0                                            | 0                  | 0             | Widening westside.    |
| 1873       | 7,389          | 3.20                   | 23,644.00      | 1878        | 1.71                  |                                              | .017               |               |                       |
|            |                |                        |                | 1887        | .529                  |                                              | .028               | 0             |                       |
| 1896       | 1,795          |                        |                | -----       | 0                     | 0                                            | 0                  | 0             | Widening.             |
| 1879       | 5,666          | 1.46                   | 8,793.00       | -----       |                       |                                              |                    |               |                       |
| 1889       | 3,123          | 2.00                   | 7,764.00       | -----       |                       | .024                                         |                    | .037          |                       |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                 | From—                           | To—                  | Kind of pavement or roadway. |
|-------------------------|---------------------------------|----------------------|------------------------------|
| Fifth, NW               | Q                               | Florida avenue       | Asphalt, B. B.               |
| Fifth (Larch)           | Florida avenue                  | Maple (T)            | do                           |
| Do                      | Maple                           | Spruce               | do                           |
| Fifth, NE               | East Capitol                    | Stanton square       | Asphalt block                |
| Do                      | Stanton square                  | D                    | do                           |
| Do                      | D                               | Florida avenue       | Gravel                       |
| Fifth, SE               | East Capitol                    | Pennsylvania avenue  | Asphalt, H. B.               |
| Do                      | Crossing square at              | Pennsylvania avenue  | Asphalt block                |
| Do                      | C                               | E                    | Asphalt, H. B.               |
| Do                      | E                               | G                    | Asphalt block                |
| Do                      | G                               | Virginia avenue      | Gravel                       |
| Sixth, NW               | Missouri avenue                 | Louisiana avenue     | Asphalt, H. B.               |
| Do                      | Louisiana avenue                | E                    | Asphalt, B. B.               |
| Do                      | E                               | F                    | Asphalt, H. B.               |
| Do                      | F                               | G                    | Granite                      |
| Do                      | G                               | New York avenue      | Coal tar                     |
| Do                      | New York avenue                 | Florida avenue       | Asphalt, H. B.               |
| Do                      | Florida avenue                  | Spruce               | do                           |
| Do                      | Pomeroy                         | Lincoln              | Gravel                       |
| Sixth, NE               | East Capitol                    | Maryland avenue      | Asphalt block                |
| Do                      | Maryland avenue                 | Massachusetts avenue | do                           |
| Do                      | do                              | D                    | do                           |
| Do                      | D                               | F                    | Gravel                       |
| Do                      | F                               | H                    | Asphalt, H. B.               |
| Do                      | K                               | Florida avenue       | Gravel                       |
| Do                      | Brentwood road                  | Eckington line       | Asphalt                      |
| Sixth, SE               | East Capitol                    | Pennsylvania avenue  | Asphalt block                |
| Do                      | Pennsylvania avenue             | C                    | do                           |
| Do                      | C                               | Virginia avenue      | do                           |
| Sixth, SW               | Missouri avenue                 | C, south             | Rubble                       |
| Do                      | C                               | Water                | Granite                      |
| Six-and-a-half, SW      | C                               | E                    | Asphalt block                |
| Seventh, NW             | B                               | Pennsylvania ave     | Granite                      |
| Seventh, NW (west side) | Market space                    | D                    | do                           |
| Seventh, NW             | Pennsylvania avenue             | D                    | do                           |
|                         | (East side, Market space to D.) |                      | Coal tar                     |
| Do                      | D to E and G to Q.              |                      | Granite                      |
| Do                      | Intersections G, H, and I.      |                      | do                           |
| Do                      | E                               | G                    | Asphalt, H. B.               |
| Seventh, NW (west side) | Q                               | Florida avenue       | Granite                      |
| Seventh, NW             | Q                               | do                   | do                           |
| Seventh, NE             | East Capitol                    | Massachusetts avenue | Asphalt block                |
| Do                      | Massachusetts avenue            | Maryland avenue      | do                           |
| Do                      | Maryland avenue                 | Florida avenue       | Gravel                       |
| Seventh, SE             | East Capitol                    | Pennsylvania avenue  | Asphalt block                |
| Do                      | Pennsylvania avenue             | Virginia avenue      | do                           |
| Do                      | Virginia avenue                 | M                    | Macadam                      |
| Seventh, SW             | B, N                            | B, S                 | Trap                         |
| Do                      | B, S                            | Water                | Granite                      |
| Eighth, NW              | Pennsylvania avenue             | E                    | do                           |
| Do                      | E                               | F                    | Concrete                     |
| Do                      | G                               | L                    | Asphalt, H. B.               |
| Do                      | L                               | N                    | Asphalt, B. B.               |
| Do                      | N                               | R                    | Asphalt, H. B.               |
| Do                      | R                               | S                    | Coal tar                     |
| Do                      | S                               | Florida avenue       | do                           |
| Do                      | Florida avenue                  | Grant avenue         | Macadam                      |
| Do                      | East Capitol                    | Massachusetts avenue | Asphalt block                |
| Eighth, NE              | Massachusetts avenue            | Maryland avenue      | do                           |
| Do                      | Maryland avenue                 | I                    | Gravel                       |
| Do                      | I                               | K                    | Macadam                      |



TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.               | From—                                | To—                   | Kind of pavement or roadway. |
|-----------------------|--------------------------------------|-----------------------|------------------------------|
| Eighth, NE            | L                                    | Florida avenue        | Macadam                      |
| Eighth, SE            | East Capitol                         | North Carolina avenue | Asphalt, H. B.               |
| Do.                   | North Carolina avenue                | Pennsylvania avenue   | Asphalt                      |
| Do.                   | Pennsylvania avenue                  | K                     | Asphalt, H. B.               |
| Do.                   | K                                    | M                     | do                           |
| Do.                   | Intersection of M.                   |                       | do                           |
| Eighth, SW            | B                                    | C                     | Asphalt                      |
| Do.                   | C                                    | E                     | Asphalt, H. B.               |
| Do.                   | E                                    | H                     | do                           |
| Do.                   | H                                    | Water                 | Gravel                       |
| Ninth, NW             | B                                    | Pennsylvania avenue   | Granite                      |
| Do.                   | Pennsylvania avenue                  | F                     | Asphalt, H. B.               |
| Do.                   | F                                    | P                     | Coal tar                     |
| Ninth, NW (east side) | P                                    | Rhode Island avenue   | Asphalt, H. B.               |
| Ninth, NW (west side) | P                                    | Florida avenue        | do                           |
| Ninth, NW (east side) | Rhode Island avenue                  | do                    | do                           |
| Ninth, NW             | Florida avenue                       | Grant avenue          | Macadam                      |
| Ninth NE              | East Capitol                         | Massachusetts avenue  | Asphalt, H. B.               |
| Do.                   | Massachusetts avenue                 | Maryland avenue       | Asphalt block                |
| Do.                   | Maryland avenue                      | H                     | Asphalt                      |
| Do.                   | H                                    | I                     | Gravel                       |
| Do.                   | G                                    | Florida avenue        | Macadam                      |
| Ninth, SE             | East Capitol and Pennsylvania avenue | E and I               | do                           |
| Do.                   | Pennsylvania avenue                  | E                     | Asphalt, H. B.               |
| Do.                   | South Carolina avenue                | Pennsylvania avenue   | Asphalt block                |
| Do.                   | I                                    | K                     | Gravel                       |
| Do.                   | K                                    | M                     | Macadam                      |
| Ninth, SW             | B                                    | C                     | Asphalt                      |
| Do.                   | C                                    | Water                 | Granite                      |
| Tenth, NW             | B                                    | Pennsylvania avenue   | do                           |
| Do.                   | D                                    | E                     | Asphalt, H. B.               |
| Do.                   | E                                    | F                     | do                           |
| Do.                   | F                                    | G                     | do                           |
| Do.                   | G                                    | K                     | Coal tar                     |
| Do.                   | K                                    | M                     | Asphalt, H. B.               |
| Do.                   | M                                    | O                     | do                           |
| Do.                   | O                                    | R                     | do                           |
| Do.                   | R                                    | S                     | Coal tar                     |
| Do.                   | S                                    | T                     | Asphalt, H. B.               |
| Do.                   | T                                    | U                     | do                           |
| Do.                   | U                                    | Florida avenue        | do                           |
| Tenth, NE             | East Capitol                         | C                     | Asphalt block                |
| Do.                   | C                                    | Maryland avenue       | Gravel                       |
| Do.                   | Maryland avenue                      | G                     | Asphalt, H. B.               |
| Do.                   | G                                    | H                     | do                           |
| Do.                   | H                                    | I                     | Gravel                       |
| Tenth, SE             | East Capitol                         | D                     | Macadam                      |
| Do.                   | D                                    | Pennsylvania avenue   | Asphalt block                |
| Do.                   | Pennsylvania avenue                  | I                     | do                           |
| Do.                   | do                                   | I                     | do                           |
| Do.                   | K                                    | M                     | Macadam                      |
| Tenth, SW             | B                                    | Maryland avenue       | Asphalt block                |
| Do.                   | D                                    | Water                 | Cobble                       |
| Eleventh, NW          | B                                    | D                     | Asphalt, H. B.               |
| Do.                   | D                                    | E                     | do                           |



with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks                                                                                 |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|-----------------------------------------------------------------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                                                                                         |
| 1901       | 1,500         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | 4-inch base.                                                                            |
| 1895       | 2,508         | \$1.68                 | \$6,269.00     | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1893       | 4,765         | 1.93                   | 10,493.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1884       | 9,182         | 1.92                   | 17,630.00      | -----       | -----                 | \$0.031                                      | -----              | \$0.117       | In place of cobble. On cobble base.                                                     |
| 1883       | 2,920         | 2.33                   | 6,825.00       | -----       | -----                 | .015                                         | -----              | .065          |                                                                                         |
| 1898       | 480           | -----                  | 1,071.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1890       | 1,434         | 1.20                   | 3,158.00       | -----       | -----                 | .006                                         | -----              | -----         |                                                                                         |
| 1892       | 3,635         | 2.25                   | 7,800.00       | -----       | -----                 | .001                                         | -----              | .008          |                                                                                         |
| 1895       | 3,573         | 1.68                   | 7,459.00       | -----       | 0                     | 0                                            | 0                  | 0             | In place of coal tar.                                                                   |
| -----      | 1,800         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1879       | 2,200         | 1.91                   | 4,316.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1895       | 5,381         | 2.26                   | 9,004.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | 1878        | \$0.54                | -----                                        | \$0.031            | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1884        | .37                   | -----                                        | -----              | -----         | 4-inch base.                                                                            |
| -----      | -----         | -----                  | -----          | 1885        | .206                  | -----                                        | -----              | -----         |                                                                                         |
| 1872       | 28,982        | 3.20                   | 94,558.00      | -----       | .215                  | -----                                        | -----              | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1886        | .052                  | -----                                        | .024               | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1887        | .43                   | -----                                        | -----              | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1896        | .038                  | -----                                        | .043               | .005          | 4-inch base.                                                                            |
| 1883       | 1,583         | 2.28                   | 3,633.00       | -----       | -----                 | .03                                          | -----              | 0             |                                                                                         |
| 1879       | 6,147         | 1.46                   | 9,513.00       | -----       | -----                 | .007                                         | -----              | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1884       | 3,371         | 2.30                   | 7,759.00       | -----       | -----                 | .02                                          | -----              | .026          |                                                                                         |
| -----      | 3,500         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | 4-inch base.                                                                            |
| 1892       | 1,217         | 2.00                   | 4,035.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1891       | 6,712         | 2.00                   | 21,589.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1891       | 5,781         | 2.00                   | 17,962.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1901       | 2,160         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | Cobble base.                                                                            |
| 1890       | 2,300         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | 6,073         | .96                    | 12,632.00      | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1901       | 817           | 1.79                   | 2,351.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1897       | 1,247         | 1.77                   | 2,130.00       | -----       | -----                 | -----                                        | -----              | -----         | Laid in 1885, widened 1898; practically new pavement. Roadway widened, granite removed. |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1901       | 1,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1889       | 1,454         | 1.20                   | 2,879.00       | -----       | -----                 | .003                                         | -----              | 0             |                                                                                         |
| 1883       | 7,061         | -----                  | 22,859.00      | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1872       | 3,103         | 3.20                   | 9,927.00       | -----       | -----                 | -----                                        | -----              | -----         | In place of cobble.                                                                     |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1898       | 2,487         | 1.75                   | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| -----      | -----         | -----                  | 12,256.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1898       | 2,000         | 1.75                   | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1880       | 955           | 1.74                   | 1,775.00       | -----       | -----                 | .049                                         | -----              | .009          | 4-inch base.                                                                            |
| 1875       | 4,828         | 3.00                   | 14,913.00      | 1889        | 1.26                  | .014                                         | .037               | -----         |                                                                                         |
| 1880       | 3,368         | 1.47                   | 5,074.00       | 1891        | .43                   | -----                                        | .016               | .056          |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | .017               | .018          |                                                                                         |
| 1881       | 3,443         | 1.85                   | 6,519.00       | -----       | -----                 | -----                                        | .009               | .01           |                                                                                         |
| 1883       | 4,433         | 2.28                   | 10,109.00      | -----       | -----                 | -----                                        | .043               | .05           | In place of cobble.                                                                     |
| 1887       | 1,992         | 1.98                   | 6,640.00       | 1901        | 1.00                  | .068                                         | -----              | .041          |                                                                                         |
| 1891       | 1,948         | 2.25                   | 6,344.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1895       | 2,588         | 1.68                   | 6,075.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1900       | 4,683         | 1.80                   | 12,291.00      | -----       | 0                     | 0                                            | 0                  | 0             | 4-inch base.                                                                            |
| 1897       | 4,208         | 1.77                   | 10,972.00      | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | 2,670         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1893       | 2,915         | 1.93                   | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1892       | 2,061         | 2.00                   | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | In place of cobble.                                                                     |
| 1890       | 2,160         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1891       | 4,748         | .93                    | 8,085.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1896       | 788           | 2.00                   | 2,489.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1897       | 4,478         | 1.84                   | 11,449.00      | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | 449           | 1.80                   | 1,017.00       | -----       | -----                 | -----                                        | -----              | -----         | In place of cobble.                                                                     |
| 1901       | 1,500         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1886       | 2,411         | 2.10                   | 5,544.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1873       | 2,589         | .70                    | 1,812.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1897       | 3,854         | 1.55                   | 8,408.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1878       | 2,500         | 1.78                   | 4,451.00       | 1891        | 1.736                 | .032                                         | .012               | 0             |                                                                                         |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                  | From—                                   | To—                         | Kind of pavement or roadway. |
|--------------------------|-----------------------------------------|-----------------------------|------------------------------|
| Eighth, NE .....         | L .....                                 | Florida avenue .....        | Macadam .....                |
| Eighth, SE .....         | East Capitol .....                      | North Carolina avenue ..... | Asphalt, H. B. ....          |
| Do. ....                 | North Carolina avenue .....             | Pennsylvania avenue .....   | Asphalt .....                |
| Do. ....                 | Pennsylvania avenue .....               | K .....                     | Asphalt, H. B. ....          |
| Do. ....                 | K .....                                 | M .....                     | do .....                     |
| Do. ....                 | Intersection of M. ....                 |                             | do .....                     |
| Eighth, SW .....         | B .....                                 | C .....                     | Asphalt .....                |
| Do. ....                 | C .....                                 | E .....                     | Asphalt, H. B. ....          |
| Do. ....                 | E .....                                 | H .....                     | do .....                     |
| Do. ....                 | H .....                                 | Water .....                 | Gravel .....                 |
| Ninth, NW .....          | B .....                                 | Pennsylvania avenue .....   | Granite .....                |
| Do. ....                 | Pennsylvania avenue .....               | F .....                     | Asphalt, H. B. ....          |
| Do. ....                 | F .....                                 | P .....                     | Coal tar .....               |
| Ninth, NW (east side) .. | P .....                                 | Rhode Island avenue .....   | Asphalt, H. B. ....          |
| Ninth, NW (west side) .. | P .....                                 | Florida avenue .....        | do .....                     |
| Ninth, NW (east side) .. | Rhode Island avenue .....               | do .....                    | do .....                     |
| Ninth, NW .....          | Florida avenue .....                    | Grant avenue .....          | Macadam .....                |
| Ninth NE .....           | East Capitol .....                      | Massachusetts avenue .....  | Asphalt, H. B. ....          |
| Do. ....                 | Massachusetts avenue .....              | Maryland avenue .....       | Asphalt block .....          |
| Do. ....                 | Maryland avenue .....                   | H .....                     | Asphalt .....                |
| Do. ....                 | H .....                                 | I .....                     | Gravel .....                 |
| Do. ....                 | G .....                                 | Florida avenue .....        | Macadam .....                |
| Ninth, SE .....          | East Capitol and Pennsylvania avenue .. | E and I .....               | do .....                     |
| Do. ....                 | Pennsylvania avenue .....               | E .....                     | Asphalt, H. B. ....          |
| Do. ....                 | South Carolina avenue ..                | Pennsylvania avenue .....   | Asphalt block .....          |
| Do. ....                 | do .....                                | do .....                    | do .....                     |
| Do. ....                 | I .....                                 | K .....                     | Gravel .....                 |
| Do. ....                 | K .....                                 | M .....                     | Macadam .....                |
| Ninth, SW .....          | B .....                                 | C .....                     | Asphalt .....                |
| Do. ....                 | C .....                                 | Water .....                 | Granite .....                |
| Tenth, NW .....          | B .....                                 | Pennsylvania avenue .....   | do .....                     |
| Do. ....                 | D .....                                 | E .....                     | Asphalt, H. B. ....          |
| Do. ....                 | E .....                                 | F .....                     | do .....                     |
| Do. ....                 | F .....                                 | G .....                     | do .....                     |
| Do. ....                 | G .....                                 | K .....                     | Coal tar .....               |
| Do. ....                 | K .....                                 | M .....                     | Asphalt, H. B. ....          |
| Do. ....                 | M .....                                 | O .....                     | do .....                     |
| Do. ....                 | O .....                                 | R .....                     | do .....                     |
| Do. ....                 | R .....                                 | S .....                     | Coal tar .....               |
| Do. ....                 | S .....                                 | T .....                     | Asphalt, H. B. ....          |
| Do. ....                 | T .....                                 | U .....                     | do .....                     |
| Do. ....                 | U .....                                 | Florida avenue .....        | do .....                     |
| Tenth, NE .....          | East Capitol .....                      | C .....                     | Asphalt block .....          |
| Do. ....                 | C .....                                 | Maryland avenue .....       | Gravel .....                 |
| Do. ....                 | Maryland avenue .....                   | G .....                     | Asphalt, H. B. ....          |
| Do. ....                 | G .....                                 | H .....                     | do .....                     |
| Do. ....                 | H .....                                 | I .....                     | Gravel .....                 |
| Tenth, SE .....          | East Capitol .....                      | D .....                     | Macadam .....                |
| Do. ....                 | D .....                                 | Pennsylvania avenue .....   | Asphalt block .....          |
| Do. ....                 | Pennsylvania avenue .....               | I .....                     | do .....                     |
| Do. ....                 | do .....                                | I .....                     | do .....                     |
| Do. ....                 | K .....                                 | M .....                     | Macadam .....                |
| Tenth, SW .....          | B .....                                 | Maryland avenue .....       | Asphalt block .....          |
| Do. ....                 | D .....                                 | Water .....                 | Cobble .....                 |
| Eleventh, NW .....       | B .....                                 | D .....                     | Asphalt, H. B. ....          |
| Do. ....                 | D .....                                 | E .....                     | do .....                     |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks                                                                                 |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|-----------------------------------------------------------------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                                                                                         |
| 1901       | 1,500         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | 4-inch base.                                                                            |
| 1895       | 2,548         | \$1.68                 | \$6,269.00     | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1893       | 4,745         | 1.93                   | 10,493.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1884       | 9,182         | 1.92                   | 17,630.00      | -----       | -----                 | \$0.031                                      | -----              | \$0.117       | In place of cobble. On cobble base.                                                     |
| 1883       | 2,929         | 2.33                   | 6,825.00       | -----       | -----                 | .015                                         | -----              | .065          |                                                                                         |
| 1898       | 480           | -----                  | 1,071.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1890       | 1,434         | 1.20                   | 3,158.00       | -----       | -----                 | .006                                         | -----              | -----         |                                                                                         |
| 1892       | 3,035         | 2.25                   | 7,800.00       | -----       | -----                 | .001                                         | -----              | .008          |                                                                                         |
| 1895       | 3,573         | 1.68                   | 7,459.00       | -----       | 0                     | 0                                            | 0                  | 0             | In place of coal tar.                                                                   |
| -----      | 1,800         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1879       | 2,290         | 1.91                   | 4,316.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1895       | 3,381         | 2.26                   | 9,004.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1878        | \$0.54                | -----                                        | \$0.031            | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1884        | .37                   | -----                                        | -----              | -----         | 4-inch base.                                                                            |
| -----      | -----         | -----                  | -----          | 1885        | .296                  | -----                                        | -----              | -----         |                                                                                         |
| 1872       | 28,982        | 3.20                   | 94,558.00      | -----       | -----                 | .215                                         | -----              | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1887        | .052                  | -----                                        | .024               | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1896        | .43                   | -----                                        | -----              | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | 1897        | .038                  | -----                                        | .043               | .005          | 4-inch base.                                                                            |
| 1883       | 1,583         | 2.28                   | 3,633.00       | -----       | -----                 | .03                                          | -----              | 0             |                                                                                         |
| 1879       | 6,147         | 1.46                   | 9,513.00       | -----       | -----                 | .007                                         | -----              | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1884       | 3,371         | 2.30                   | 7,759.00       | -----       | -----                 | .02                                          | -----              | .026          |                                                                                         |
| -----      | 3,500         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | 4-inch base.                                                                            |
| 1892       | 1,217         | 2.00                   | 4,035.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1891       | 6,712         | 2.00                   | 21,589.00      | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1891       | 5,781         | 2.00                   | 17,962.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1901       | 2,160         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | Cobble base.                                                                            |
| 1890       | 2,300         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | 6,073         | .96                    | 12,632.00      | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1901       | 817           | 1.79                   | 2,351.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1897       | 1,247         | 1.77                   | 2,130.00       | -----       | -----                 | -----                                        | -----              | -----         | Laid in 1885, widened 1898; practically new pavement. Roadway widened, granite removed. |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1901       | 1,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1889       | 2,000         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1883       | 1,454         | 1.20                   | 2,879.00       | -----       | -----                 | .003                                         | -----              | 0             |                                                                                         |
| 1883       | 7,061         | -----                  | 22,859.00      | -----       | -----                 | -----                                        | -----              | -----         | In place of cobble.                                                                     |
| 1872       | 3,103         | 3.20                   | 9,927.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1898       | 2,487         | 1.75                   | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1898       | 2,000         | 1.75                   | 12,256.00      | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1880       | 955           | 1.74                   | 1,775.00       | -----       | -----                 | .049                                         | -----              | .009          | 4-inch base.                                                                            |
| 1875       | 4,828         | 3.00                   | 14,913.00      | 1889        | 1.26                  | .014                                         | .037               | -----         |                                                                                         |
| 1880       | 3,368         | 1.47                   | 5,074.00       | 1891        | .43                   | -----                                        | .016               | .056          |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | .017               | .018          |                                                                                         |
| 1881       | 3,443         | 1.85                   | 6,519.00       | -----       | -----                 | -----                                        | .009               | .01           |                                                                                         |
| 1883       | 4,433         | 2.28                   | 10,109.00      | -----       | -----                 | -----                                        | .043               | .05           | In place of cobble.                                                                     |
| 1887       | 1,092         | 1.98                   | 6,640.00       | 1901        | 1.00                  | .068                                         | -----              | .041          |                                                                                         |
| 1891       | 1,948         | 2.25                   | 6,544.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1895       | 2,588         | 1.68                   | 6,075.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1900       | 4,683         | 1.80                   | 12,291.00      | -----       | 0                     | 0                                            | 0                  | 0             | 4-inch base.                                                                            |
| 1897       | 4,208         | 1.77                   | 10,972.00      | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | 2,670         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1893       | 2,915         | 1.93                   | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1892       | 2,061         | 2.00                   | -----          | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| -----      | -----         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         | In place of cobble.                                                                     |
| 1890       | 2,160         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1891       | 4,748         | .93                    | 8,085.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1896       | 788           | 2.00                   | 2,489.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1897       | 4,478         | 1.84                   | 11,449.00      | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| -----      | 449           | 1.80                   | 1,017.00       | -----       | -----                 | -----                                        | -----              | -----         | In place of cobble.                                                                     |
| 1901       | 1,500         | -----                  | -----          | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1886       | 2,411         | 2.10                   | 5,544.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1873       | 2,589         | .70                    | 1,812.00       | -----       | -----                 | -----                                        | -----              | -----         |                                                                                         |
| 1897       | 3,854         | 1.55                   | 8,408.00       | -----       | 0                     | 0                                            | 0                  | 0             |                                                                                         |
| 1878       | 2,500         | 1.78                   | 4,451.00       | 1891        | 1.736                 | .032                                         | .012               | 0             |                                                                                         |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                    | From—                                  | To—                              | Kind of pavement or roadway. |
|----------------------------|----------------------------------------|----------------------------------|------------------------------|
| Eleventh, NW               | E .....                                | F .....                          | Granite .....                |
| Do.....                    | F .....                                | G .....                          | do .....                     |
| Do.....                    | G .....                                | K .....                          | Coal tar .....               |
| Do.....                    | K .....                                | O .....                          | Granite .....                |
| Do .....                   | O .....                                | Florida avenue .....             | Asphalt, H. B. ....          |
| Eleventh, NE.....          | East Capitol .....                     | Massachusetts avenue .....       | Asphalt block .....          |
| Do.....                    | Massachusetts avenue .....             | C .....                          | do .....                     |
| Do.....                    | C .....                                | Maryland avenue .....            | Gravel .....                 |
| Do.....                    | Maryland avenue .....                  | Florida avenue .....             | Macadam .....                |
| Eleventh, SE .....         | East Capitol .....                     | C .....                          | Asphalt block .....          |
| Do.....                    | C .....                                | Pennsylvania avenue .....        | do .....                     |
| Do.....                    | Pennsylvania avenue .....              | Eastern Branch .....             | Granite .....                |
| Eleventh, SE. (west side). | M .....                                | do .....                         | do .....                     |
| Eleventh, SW .....         | B, south .....                         | Water .....                      | Belgian .....                |
| Twelfth, NW .....          | C .....                                | D .....                          | Asphalt, H. B. ....          |
| Do.....                    | Pennsylvania avenue .....              | E .....                          | do .....                     |
| Do.....                    | E .....                                | F .....                          | Granite .....                |
| Do.....                    | F .....                                | N .....                          | Coal tar .....               |
| Do.....                    | Intersection of G. ....                |                                  | Asphalt, H. B. ....          |
| Do.....                    | N .....                                | O .....                          | do .....                     |
| Do.....                    | O .....                                | Rhode Island avenue .....        | do .....                     |
| Do.....                    | Rhode Island avenue .....              | Vermont avenue .....             | Coal tar .....               |
| Do.....                    | R .....                                | S .....                          | do .....                     |
| Do.....                    | S .....                                | V .....                          | Asphalt, R. B. ....          |
| Do.....                    | V .....                                | Florida avenue .....             | Asphalt, H. B. ....          |
| Twelfth, NE .....          | Lincoln square northward. ....         |                                  | do .....                     |
| Do.....                    | Extension to 144 feet south of B. .... |                                  | do .....                     |
| Do.....                    | C .....                                | Maryland avenue .....            | Macadam .....                |
| Do.....                    | Maryland avenue .....                  | H .....                          | do .....                     |
| Do.....                    | H .....                                | Florida avenue .....             | do .....                     |
| Do.....                    | Florida avenue .....                   | Mount Olivet road .....          | do .....                     |
| Do.....                    | Detroit .....                          | Bunker Hill road .....           | Gravel .....                 |
| Twelfth, SE .....          | East Capitol .....                     | Pennsylvania avenue .....        | do .....                     |
| Twelfth, SW .....          | Pennsylvania avenue to .....           | Ohio avenue and B to river. .... | Belgian .....                |
| Do.....                    | B, N .....                             | B, S .....                       | do .....                     |
| Thirteenth, NW .....       | B .....                                | C .....                          | Asphalt, H. B. ....          |
| Do.....                    | C .....                                | Pennsylvania avenue .....        | Coal tar .....               |
| Do.....                    | Pennsylvania avenue .....              | E .....                          | Asphalt, H. B. ....          |
| Do.....                    | E .....                                | F .....                          | Granite .....                |
| Do.....                    | F .....                                | P .....                          | Coal tar .....               |
| Do.....                    | Around Iowa circle. ....               |                                  | do .....                     |
| Do.....                    | P .....                                | Corcoran .....                   | Asphalt, H. B. ....          |
| Do.....                    | Corcoran .....                         | T .....                          | do .....                     |
| Do.....                    | T .....                                | Florida avenue .....             | do .....                     |
| Do.....                    | Florida avenue .....                   | Clifton .....                    | Macadam .....                |
| Do.....                    | Clifton .....                          | Whitney avenue .....             | do .....                     |
| Do.....                    | Whitney avenue .....                   | Spring road .....                | Gravel .....                 |
| Thirteenth, NE .....       | Emerson .....                          | Maryland avenue .....            | Asphalt, B. B. ....          |
| Thirteenth, SE .....       | East Capitol .....                     | D .....                          | Gravel .....                 |
| Do.....                    | D .....                                | Pennsylvania avenue .....        | Macadam .....                |
| Thirteenth, SW .....       | B .....                                | Maryland avenue .....            | Coal tar .....               |
| Thirteen-and-a-half, NW.   | do .....                               | E .....                          | Cobble .....                 |
| Thirteen-and-a-half, SW    | do .....                               | D .....                          | Asphalt block .....          |
| Fourteenth, NW .....       | do .....                               | Pennsylvania avenue .....        | Coal tar .....               |
| Do.....                    | Pennsylvania avenue .....              | F .....                          | Granite .....                |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.                           |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|------------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                                    |
| 1879       | 1,734         | \$2.11                 | \$3,659.00     |             |                       |                                              |                    |               |                                    |
| 1880       | 1,214         | 1.89                   | 2,321.00       |             |                       |                                              |                    |               |                                    |
| 1875       | 3,866         | 3.00                   | 12,813.00      | 1898        | \$0.59                | \$0.045                                      | \$0.067            | \$0.044       |                                    |
| 1880       | 4,326         | 1.73                   | 8,104.00       |             |                       |                                              |                    |               |                                    |
| 1891       | 8,734         | 2.25                   | 37,118.00      |             |                       | .002                                         |                    | .0007         |                                    |
| 1895       | 1,093         | 1.84                   | 2,500.00       |             |                       |                                              |                    |               |                                    |
| 1900       | 4,262         | 1.77                   | 9,412.00       |             |                       |                                              |                    |               |                                    |
|            | 2,300         |                        |                |             |                       |                                              |                    |               |                                    |
| 1895       | 6,951         | .68                    | 5,642.00       |             |                       |                                              |                    |               |                                    |
| 1891       | 8,076         | 2.00                   | 23,776.00      |             |                       |                                              |                    |               |                                    |
| 1893       | 7,006         | 2.00                   | 19,523.00      |             |                       |                                              |                    |               |                                    |
| 1880       | 15,451        | .91                    | 53,724.00      |             |                       |                                              |                    |               |                                    |
| 1882       | 4,698         | 2.70                   | 11,791.00      |             |                       |                                              |                    |               |                                    |
| 1873       | 10,511        | 3.45                   | 36,393.00      |             |                       |                                              |                    |               |                                    |
| 1897       | 1,911         | 1.55                   | 4,366.00       |             | 0                     | 0                                            | 0                  | 0             |                                    |
| 1878       | 1,292         | 1.78                   | 2,316.00       | 1886        | .946                  | .02                                          | .068               | .071          |                                    |
| 1879       | 1,627         | 2.11                   | 3,434.00       |             |                       |                                              |                    |               |                                    |
| 1875       | 13,069        | 3.00                   | 40,517.00      | 1889        | .117                  | .005                                         | .04                |               |                                    |
| 1881       | 198           | 2.04                   | 407.00         | 1894        | .845                  |                                              | .023               | .015          |                                    |
| 1881       | 1,522         | 1.85                   | 2,873.00       |             | 0                     | 0                                            | 0                  | 0             |                                    |
|            |               |                        |                |             |                       | .041                                         |                    | 0             |                                    |
| 1883       | 1,859         | 2.27                   | 4,240.00       |             |                       | .035                                         |                    | .017          |                                    |
| 1887       | 2,394         | 1.98                   | 8,120.00       |             |                       | .048                                         |                    | .076          |                                    |
| 1888       | 1,798         | 2.00                   | 8,177.00       |             |                       | .004                                         |                    | 0             |                                    |
| 1890       | 5,377         | 2.00                   | 18,873.00      |             |                       | .006                                         |                    | 0             |                                    |
| 1891       | 3,554         | 2.25                   | 12,542.00      |             | 0                     | 0                                            | 0                  | 0             |                                    |
| 1895       | 580           | 1.68                   | 1,024.00       |             | 0                     | 0                                            | 0                  | 0             |                                    |
| 1898       | 1,737         | 1.76                   | 3,830.00       |             | 0                     | 0                                            | 0                  | 0             |                                    |
| 1901       | 4,770         |                        |                |             |                       |                                              |                    |               |                                    |
| 1890       | 4,374         | .96                    | 4,450.00       |             |                       |                                              |                    |               |                                    |
| 1890       | 3,543         |                        | 6,188.00       |             |                       |                                              |                    |               |                                    |
| 1898       | 10,544        | .91                    | 10,817.00      |             |                       |                                              |                    |               |                                    |
| 1894       | 13,758        | .20                    | 7,333.00       |             |                       |                                              |                    |               |                                    |
| 1895       | 11,305        | .59                    | 6,979.00       |             |                       |                                              |                    |               |                                    |
| 1872       | 10,708        | 3.00                   | 37,858.00      |             |                       |                                              |                    |               |                                    |
| 1872       | 8,187         | 3.50                   | 28,655.00      |             |                       |                                              |                    |               |                                    |
| 1878       | 1,760         | 1.78                   | 3,132.00       | 1893        | 1.321                 | .073                                         | .105               | .01           |                                    |
| 1875       | 3,037         | 3.00                   | 9,803.00       | 1887        | 1.49                  | .018                                         | .032               | .01           |                                    |
| 1878       | 685           | 1.79                   | 1,226.00       |             |                       | .057                                         |                    | .053          |                                    |
| 1878       | 1,741         | 2.11                   | 3,708.00       |             |                       |                                              |                    |               |                                    |
| 1873       | 15,682        | 3.20                   | 50,758.00      | 1888        | .28                   | .047                                         |                    |               |                                    |
|            |               |                        |                | 1889        | .381                  |                                              | .018               | 0             |                                    |
| 1873       | 8,838         | 3.20                   | 28,382.00      | 1885        | 1.75                  | .009                                         | .006               | .008          |                                    |
| 1881       | 2,126         | 2.09                   | 4,869.00       |             |                       | .037                                         |                    | .085          |                                    |
| 1884       | 4,273         | 2.25                   | 10,558.00      |             |                       | .041                                         |                    | .105          |                                    |
| 1891       | 7,271         | 2.25                   | 20,372.00      |             | 0                     | 0                                            | 0                  | 0             |                                    |
|            | 2,700         |                        |                |             |                       |                                              |                    |               |                                    |
| 1896       | 14,000        |                        |                |             |                       |                                              |                    |               |                                    |
| 1896       |               |                        |                |             |                       |                                              |                    |               |                                    |
| 1892       | 5,800         |                        |                |             |                       |                                              |                    |               |                                    |
| 1896       | 1,725         | 2.00                   | 4,401.00       |             | 0                     | 0                                            | 0                  | 0             |                                    |
| 1896       | 11,013        | .12                    | 6,194.00       |             |                       |                                              |                    |               |                                    |
| 1891       | 2,638         | .95                    | 5,255.00       |             |                       |                                              |                    |               |                                    |
| 1875       | 5,796         | 3.60                   | 17,117.00      | 1891        | 1.27                  | .021                                         | .032               | .002          |                                    |
|            | 3,300         |                        |                |             |                       |                                              |                    |               |                                    |
| 1895       | 3,016         | 1.84                   | 6,635.00       |             |                       |                                              |                    |               | East side laid by railway company. |
| 1887       | 8,852         | 1.97                   | 22,512.00      | 1894        | .464                  | .049                                         | .121               | .021          |                                    |
| 1884       | 1,734         | 2.39                   | 8,444.00       |             |                       |                                              |                    |               |                                    |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.                                       | From—                                  | To—                                    | Kind of pavement or roadway. |
|-----------------------------------------------|----------------------------------------|----------------------------------------|------------------------------|
| Fourteenth, NW .....                          | F .....                                | New York avenue .....                  | Coal tar .....               |
| Do .....                                      | New York avenue .....                  | H .....                                | do .....                     |
| Fourteenth, NW. (east side) .....             | H .....                                | Florida avenue .....                   | Asphalt, H. B. ....          |
| Fourteenth, NW. (west side) .....             | H .....                                | M .....                                | do .....                     |
| Do .....                                      | M .....                                | Florida avenue .....                   | do .....                     |
| Fourteenth, NW. (east side) .....             | Florida avenue .....                   | Clifton .....                          | do .....                     |
| Do .....                                      | Clifton .....                          | Roanoke .....                          | do .....                     |
| Fourteenth, NW. (west side) .....             | Florida avenue .....                   | Euclid .....                           | do .....                     |
| Fourteenth, NW .....                          | Yale, northward.                       |                                        | do .....                     |
| Do .....                                      | Extension to Park.                     |                                        | do .....                     |
| Fourteenth, NW. (east side) .....             | Kenyon .....                           | Park .....                             | do .....                     |
| Fourteenth Street road .....                  | East Capitol .....                     | E .....                                | Gravel .....                 |
| Fourteenth, NE .....                          | Maryland avenue .....                  | E .....                                | Macadam .....                |
| Fourteenth, SE .....                          | East Capitol .....                     | Pennsylvania avenue .....              | Gravel .....                 |
| Fourteenth, SW .....                          | B, north .....                         | B, south .....                         | Belgian .....                |
| Do .....                                      | B, south .....                         | Alley south of B. ....                 | Asphalt, H. B. ....          |
| Do .....                                      | Alley south of B. ....                 | Maryland avenue .....                  | Granite .....                |
| Fifteenth, NW .....                           | B .....                                | E .....                                | Asphalt .....                |
| Do .....                                      | E .....                                | Pennsylvania avenue .....              | Asphalt, H. B. ....          |
| Do .....                                      | Pennsylvania avenue .....              | New York avenue .....                  | do .....                     |
| Do .....                                      | New York avenue .....                  | Vermont avenue .....                   | Coal tar .....               |
| Do .....                                      | I .....                                | K .....                                | do .....                     |
| Do .....                                      | K .....                                | Rhode Island avenue .....              | Asphalt, H. B. ....          |
| Do .....                                      | Rhode Island avenue .....              | S .....                                | Coal tar .....               |
| Do .....                                      | S .....                                | U .....                                | Asphalt, H. B. ....          |
| Do .....                                      | U .....                                | V .....                                | do .....                     |
| Fifteenth, NE .....                           | East Capitol .....                     | E .....                                | Gravel .....                 |
| Fifteenth, SE .....                           | do .....                               | Pennsylvania avenue .....              | do .....                     |
| Fifteen-and-a-half, NW. (Madison place) ..... | Pennsylvania avenue .....              | H .....                                | Coal tar .....               |
| Sixteenth, NW .....                           | H .....                                | Scott square .....                     | Asphalt, H. B. ....          |
| Do .....                                      | Scott square .....                     | R .....                                | do .....                     |
| Do .....                                      | R .....                                | 156 feet south of Florida avenue ..... | do .....                     |
| Do .....                                      | 156 feet south of Florida avenue ..... | Morris .....                           | do .....                     |
| Do .....                                      | Morris .....                           | Superior .....                         | Macadam .....                |
| Do .....                                      | Kenesaw .....                          | Park .....                             | do .....                     |
| Sixteen-and-a-half, NW. (Jackson place) ..... | Pennsylvania avenue .....              | H .....                                | Coal tar .....               |
| Seventeenth, NW .....                         | B .....                                | E .....                                | do .....                     |
| Do .....                                      | E .....                                | New York avenue .....                  | Asphalt, H. B. ....          |
| Do .....                                      | New York avenue .....                  | Pennsylvania avenue .....              | Asphalt, B. B. ....          |
| Do .....                                      | Pennsylvania avenue .....              | I .....                                | Coal tar .....               |
| Do .....                                      | I .....                                | Massachusetts avenue .....             | do .....                     |
| Do .....                                      | Massachusetts avenue .....             | P .....                                | do .....                     |
| Do .....                                      | P .....                                | Q .....                                | do .....                     |
| Do .....                                      | Q .....                                | R .....                                | Asphalt, B. B. ....          |
| Do .....                                      | R .....                                | T .....                                | do .....                     |
| Do .....                                      | T .....                                | Florida avenue .....                   | Gravel .....                 |
| Do .....                                      | Grant .....                            | Lowell .....                           | Macadam .....                |
| Eighteenth, NW .....                          | Virginia avenue .....                  | D .....                                | do .....                     |
| Do .....                                      | E .....                                | New York avenue .....                  | Coal tar .....               |

with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks. |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|----------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |          |
| 1873       | 3,732         | \$3.20                 | \$11,942.00    | { 1884      | \$1.546               | \$0.008                                      | \$0.053            | \$0.037       |          |
| 1874       | 1,549         | 3.20                   | 4,957.00       | 1885        |                       |                                              |                    |               |          |
| 1879       | 29,085        | 1.97                   | 60,212.00      | 1895        |                       |                                              |                    |               |          |
| 1879       | 5,682         | 1.75                   | 10,287.00      | 1891        |                       |                                              |                    |               |          |
| 1882       | 14,583        | 2.26                   | 33,717.00      | 1893        |                       |                                              |                    |               |          |
| 1889       | 3,764         | 2.00                   |                | 1894        |                       |                                              |                    |               |          |
| 1898       | 879           | 1.77                   |                | 1895        |                       |                                              |                    |               |          |
| 1900       | 2,723         | 1.77                   |                | 1896        |                       |                                              |                    |               |          |
| 1891       | 3,725         | 2.25                   |                | 1897        |                       |                                              |                    |               |          |
| 1892       | 4,307         | 2.25                   |                | 1898        |                       |                                              |                    |               |          |
| 1894       | 486           | 1.68                   |                | 1899        |                       |                                              |                    |               |          |
|            | 6,600         |                        |                | 1900        |                       |                                              |                    |               |          |
|            | 6,600         |                        |                | 1901        |                       |                                              |                    |               |          |
|            | 3,000         |                        |                |             |                       |                                              |                    |               |          |
|            | 12,600        |                        |                |             |                       |                                              |                    |               |          |
| 1873       | 7,841         | 3.50                   | 27,443.60      |             |                       |                                              |                    |               |          |
| 1899       | 951           | 1.47                   | 2,623.00       |             |                       |                                              |                    |               |          |
| 1893       | 5,653         | 1.40                   |                |             |                       |                                              |                    |               |          |
| 1894       | 5,252         | 1.03                   | 7,643.00       |             |                       |                                              |                    |               |          |
| 1893       | 1,792         |                        |                |             |                       |                                              |                    |               |          |
| 1889       | 4,219         | 2.35                   | 13,410.00      |             |                       |                                              |                    |               |          |
| 1873       | 7,005         | 3.20                   | 22,416.00      | 1879        |                       |                                              |                    |               |          |
| 1873       | 1,724         | 3.00                   | 5,518.00       | 1891        |                       |                                              |                    |               |          |
| 1881       | 6,921         | 1.85                   | 12,997.00      |             |                       |                                              |                    |               |          |
| 1875       | 7,516         | 3.00                   | 22,548.00      | { 1887      |                       |                                              |                    |               |          |
|            |               |                        |                | 1891        |                       |                                              |                    |               |          |
| 1885       | 3,768         | 2.25                   | 9,468.00       |             |                       |                                              |                    |               |          |
| 1895       | 1,486         | 1.68                   | 3,669.00       |             |                       |                                              |                    |               |          |
| 1895       | 10,553        | .50                    | 5,721.00       |             |                       |                                              |                    |               |          |
| 1893       | 14,690        | .499                   | 9,328.00       |             |                       |                                              |                    |               |          |
| 1872       | 2,974         | 3.20                   | 9,515.00       | 1880        |                       |                                              |                    |               |          |
| 1881       | 12,450        | 2.00                   | 27,336.00      |             |                       |                                              |                    |               |          |
| 1882       | 10,818        | 2.26                   | 25,026.00      |             |                       |                                              |                    |               |          |
| 1883       | 12,525        |                        |                |             |                       |                                              |                    |               |          |
| 1899       | 7,194         | 1.76                   | 17,408.00      |             |                       |                                              |                    |               |          |
| 1895       | 1,000         |                        |                |             |                       |                                              |                    |               |          |
|            | 4,700         |                        |                |             |                       |                                              |                    |               |          |
| 1872       | 2,314         | 3.20                   | 7,406.00       | 1880        |                       |                                              |                    |               |          |
| 1872       | 6,713         | 3.20                   | 21,482.00      |             |                       |                                              |                    |               |          |
| 1897       | 2,573         | 2.18                   | 6,222.00       |             |                       |                                              |                    |               |          |
| 1889       | 4,847         |                        |                |             |                       |                                              |                    |               |          |
| 1873       | 4,958         | 3.20                   | 15,866.00      |             |                       |                                              |                    |               |          |
| 1873       | 10,603        | 3.20                   | 33,929.00      | { 1878      |                       |                                              |                    |               |          |
| 1875       | 2,095         | 3.00                   | 6,285.00       | 1894        |                       |                                              |                    |               |          |
| 1887       | 1,765         | 1.98                   | 5,552.00       | 1894        |                       |                                              |                    |               |          |
| 1889       | 1,874         | 2.00                   | 6,154.00       | 1898        |                       |                                              |                    |               |          |
| 1889       | 2,946         | 2.00                   | 10,430.00      |             |                       |                                              |                    |               |          |
|            | 4,800         |                        |                |             |                       |                                              |                    |               |          |
| 1901       | 1,100         |                        |                |             |                       |                                              |                    |               |          |
| 1873       | 2,220         |                        |                |             |                       |                                              |                    |               |          |
|            | 1,095         | 3.20                   | 3,506.00       | 1878        |                       |                                              |                    |               |          |

TABLE D.—*Descriptive list of street pavements and suburban roadways.*

| Street.           | From—                 | To—                  | Kind of pavement or roadway. |
|-------------------|-----------------------|----------------------|------------------------------|
| Eighteenth, NW    | E                     | Pennsylvania avenue. | Asphalt, H. B.               |
| Do                | Pennsylvania avenue.  | K                    | Coal tar                     |
| Do                | K                     | L                    | Asphalt block.               |
| Do                | L                     | P                    | Coal tar                     |
| Do                | P                     | Q                    | Asphalt, H. B.               |
| Do                | New Hampshire avenue. | S                    | do                           |
| Do                | S                     | Florida avenue.      | do                           |
| Do                | Florida avenue        | Columbia road        | Asphalt, B. B.               |
| Do                | do                    | Fourth               | Asphalt, H. B.               |
| Do                | Grant                 | Sixth                | do                           |
| Do                |                       | Howard               | Macadam                      |
| Nineteenth, NW    | Virginia avenue.      | E                    | do                           |
| Do                | E                     | Pennsylvania avenue  | Coal tar                     |
| Do                | Pennsylvania avenue   | K                    | Granite                      |
| Do                | K                     | M                    | do                           |
| Do                | M                     | N                    | do                           |
| Do                | N                     | Circle               | Asphalt, H. B.               |
| Do                | P                     | Florida avenue       | Coal tar                     |
| Do                | Florida avenue        | Columbia road        | Asphalt, H. B.               |
| Do                | Baltimore             | Cincinnati           | do                           |
| Do                | Virginia avenue.      | E                    | Macadam                      |
| Twentieth, NW     |                       |                      |                              |
| Do                | E                     | Pennsylvania avenue  | Coal tar                     |
| Do                | Pennsylvania avenue   | I                    | Asphalt, H. B.               |
| Do                | I                     | K                    | Granite                      |
| Do                | K                     | P                    | Coal tar                     |
| Do                | P                     | Connecticut avenue.  | do                           |
| Do                | R                     | S                    | Asphalt                      |
| Do                | S                     | Florida avenue       | Cobble                       |
| Do                | Baltimore             | Cincinnati           | Asphalt block                |
| Do                | E                     | Virginia avenue.     | Macadam                      |
| Twenty-first, NW  |                       |                      |                              |
| Do                | E                     | Pennsylvania avenue  | Coal tar                     |
| Do                | Pennsylvania avenue   | K                    | Granite                      |
| Do                | K                     | Massachusetts avenue | Coal tar                     |
| Do                | Q                     | Hillyer place        | Asphalt block                |
| Do                | Hillyer place         | R                    | Coal tar                     |
| Do                | R                     | Florida avenue       | Asphalt, B. B.               |
| Do                |                       |                      |                              |
| Twenty-second, NW | New York avenue       | Virginia avenue      | Macadam                      |
| Do                | Virginia avenue       | F                    | Asphalt, H. B.               |
| Do                | F                     | G                    | Asphalt                      |
| Do                | G                     | Pennsylvania avenue  | Coal tar                     |
| Do                | K                     | M                    | Asphalt, H. B.               |
| Do                | M                     | O                    | Asphalt, B. B.               |
| Do                | O                     | P                    | do                           |
| Do                | P                     | Massachusetts avenue | Asphalt, H. B.               |
| Do                | Massachusetts avenue  | R                    | do                           |
| Do                | Cincinnati            | Frankfort            | Macadam                      |
| Do                |                       |                      |                              |
| Twenty-third, NW  | Virginia avenue.      | E                    | Asphalt, H. B.               |
| Do                | F                     | I                    | Cobble                       |
| Do                | I                     | Pennsylvania avenue  | Asphalt                      |
| Do                | K                     | L                    | Asphalt block                |
| Do                | L                     | M                    | Asphalt, H. B.               |



with repairs to asphalt pavements to July 1, 1901—Continued.

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.                     |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                              |
| 1881       | 4,805         | \$2.05                 | \$10,466.00    |             |                       | \$0.021                                      |                    | \$0.034       |                              |
| 1872       | 4,515         | 3.20                   | 14,448.00      | 1880        | \$1.15                |                                              | \$0.024            | 0             |                              |
| 1886       | 1,431         | 2.10                   | 3,286.00       |             |                       |                                              |                    |               |                              |
| 1873       | 7,584         | 3.20                   | 24,269.00      | { 1878      | 1.54                  |                                              | .018               |               |                              |
|            |               |                        |                | { 1881      | .466                  |                                              | .032               |               |                              |
|            |               |                        |                | { 1895      | .29                   |                                              | .109               |               |                              |
|            |               |                        |                | { 1897      | 1.08                  |                                              | .018               | .018          |                              |
| 1898       | 1,764         |                        | 4,600.00       |             |                       |                                              |                    |               | In place of bituminous base. |
| 1891       | 3,130         | 2.25                   | 10,796.00      |             | 0                     | 0                                            | 0                  |               |                              |
| 1892       | 3,823         | 2.25                   | 12,333.00      |             | 0                     | 0                                            | 0                  | 0             |                              |
| 1891       | 3,206         | 2.00                   | 6,413.00       |             |                       | .021                                         |                    | .016          |                              |
| 1894       | 4,406         | 1.53                   | 9,514.00       |             | 0                     | 0                                            | 0                  | 0             | Widening.                    |
| 1894       | 227           | 1.68                   |                |             |                       |                                              |                    |               |                              |
| 1901       | 3,000         |                        |                |             |                       |                                              |                    |               |                              |
| 1901       | 3,154         |                        |                |             |                       |                                              |                    |               |                              |
| 1873       | 6,421         | 3.20                   | 20,547.00      | 1878        | 1.50                  |                                              | .011               | .028          |                              |
| 1880       | 3,170         | 1.94                   | 6,709.00       |             |                       |                                              |                    |               |                              |
| 1885       | 3,726         | 2.394                  | 8,915.00       |             |                       |                                              |                    |               |                              |
| 1882       | 1,894         | 2.58                   | 4,949.00       |             |                       |                                              |                    |               |                              |
| 1881       | 2,409         | 2.06                   | 5,198.00       |             |                       | .021                                         |                    | .086          |                              |
| 1873       | 7,598         | 3.20                   | 24,314.00      | { 1878      | 1.20                  |                                              | .01                |               |                              |
|            |               |                        |                | { 1891      |                       |                                              | .027               |               |                              |
|            |               |                        |                | { 1895      |                       |                                              | .016               | 0             |                              |
| 1900       | 5,274         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                              |
| 1900       | 1,066         |                        |                |             | 0                     | 0                                            | 0                  | 0             |                              |
| 1901       | 2,433         |                        |                |             |                       |                                              |                    |               |                              |
| 1873       | 5,579         | 3.20                   | 17,853.00      | { 1878      | 1.55                  |                                              | .019               |               |                              |
| 1879       | 981           | 1.46                   | 1,486.00       | { 1899      | 1.43                  |                                              | .077               | .152          |                              |
| 1879       | 1,349         | 1.92                   | 2,707.00       |             |                       | .022                                         |                    | 0             |                              |
| 1873       | 8,201         | 3.20                   | 24,243.00      | { 1880      | .783                  | .015                                         | .058               |               |                              |
|            |               |                        |                | { 1894      | .242                  |                                              |                    |               |                              |
|            |               |                        |                | { 1896      | .332                  |                                              | .054               | .001          |                              |
| 1873       | 2,167         | 3.20                   | 6,934.00       | { 1878      | 1.385                 |                                              | .053               |               |                              |
|            |               |                        |                | { 1896      | .284                  |                                              |                    | 0             |                              |
| 1889       | 1,995         | 1.20                   | 5,607.00       |             | 0                     | 0                                            | 0                  | 0             | Cobble base.                 |
| 1872       | 900           | .70                    | 630.00         |             |                       |                                              |                    |               |                              |
| 1901       | .845          | 1.77                   |                |             |                       |                                              |                    |               | Permit work.                 |
| 1901       | 1,460         |                        |                |             |                       |                                              |                    |               |                              |
| 1873       | 6,101         | 3.20                   | 19,524.00      | { 1878      | 1.57                  |                                              | .022               |               |                              |
|            |               |                        |                | { 1899      | 1.57                  |                                              | .031               | .097          |                              |
| 1879       | 1,385         | 1.92                   | 2,816.00       |             |                       |                                              |                    |               |                              |
| 1875       | 10,892        | 3.20                   | 34,854.00      | 1891        | 1.21                  | .019                                         |                    | .015          |                              |
| 1884       | 956           |                        |                |             |                       |                                              |                    |               |                              |
| 1887       | 988           | 1.98                   | 2,708.00       |             |                       | .052                                         |                    | .128          |                              |
| 1890       | 1,483         | 2.00                   | 5,190.00       |             |                       | .008                                         |                    | 0             |                              |
| 1901       | 3,572         |                        |                |             |                       |                                              |                    |               |                              |
| 1899       | 884           | 1.76                   | 2,215.00       |             | 0                     | 0                                            | 0                  | 0             |                              |
| 1892       | 1,406         | 1.20                   | 3,532.00       |             | 0                     | 0                                            | 0                  | 0             | Cobble base.                 |
| 1873       | 4,641         | 3.20                   | 14,851.00      | { 1894      | .907                  | .02                                          | .05                | 0             |                              |
| 1885       | 2,852         | 2.25                   | 6,720.00       | { 1900      |                       |                                              | 0                  | 0             |                              |
|            |               |                        |                |             |                       | .015                                         |                    | .023          |                              |
| 1890       | 3,894         | 2.00                   |                |             |                       | .005                                         |                    | .006          |                              |
| 1889       | 1,586         | 2.00                   | 4,882.00       |             |                       | .014                                         |                    | .014          |                              |
| 1896       | 2,968         | 1.94                   | 6,483.00       |             | 0                     | 0                                            | 0                  | 0             | 4-inch base.                 |
| 1896       | 2,128         | 1.94                   | 4,500.00       |             | 0                     | 0                                            | 0                  | 0             | Do.                          |
| 1901       | 4,050         |                        |                |             |                       |                                              |                    |               |                              |
| 1900       | 1,814         | 1.78                   | 4,206.00       |             | 0                     | 0                                            | 0                  | 0             |                              |
| 1874       | 3,642         | .70                    | 2,549.00       |             |                       |                                              |                    |               |                              |
| 1890       | 1,425         | 1.20                   | 3,347.00       |             | 0                     | 0                                            | 0                  | 0             | Cobble base.                 |
| 1886       | 587           | 2.10                   | 1,335.00       |             |                       |                                              |                    |               |                              |
| 1901       | 1,800         | 1.77                   | 4,309.00       |             | 0                     | 0                                            | 0                  | 0             | In place of asphalt block.   |

TABLE D.—*Descriptive list of street pavements and suburban roadways,*

| Street.            | From—                        | To—                          | Kind of pavement<br>or roadway. |
|--------------------|------------------------------|------------------------------|---------------------------------|
| Twenty-fourth, NW  | G                            | Pennsylvania avenue          | Cobble                          |
| Do                 | Pennsylvania avenue          | M                            | Asphalt, H. B.                  |
| Do                 | Emporia                      | Frankfort                    | Macadam                         |
| Twenty-fifth, NW   | H                            | K                            | Asphalt, H. B.                  |
| Do                 | K                            | Pennsylvania avenue          | Asphalt, B. B.                  |
| Do                 | Pennsylvania avenue          | M                            | do                              |
| Twenty-sixth, NW   | G                            | K                            | Cobble                          |
| Do                 | K                            | Pennsylvania avenue          | Granite                         |
| Do                 | Pennsylvania avenue          | M                            | Coal tar                        |
| Twenty-seventh, NW | M                            | P                            | Macadam                         |
| Twenty-eighth, NW  | M                            | Dunbarton                    | Asphalt                         |
| Do                 | Dunbarton                    | P                            |                                 |
| Do                 | P                            | Q                            | Asphalt, B. B.                  |
| Do                 | Q                            | U                            | Macadam                         |
| Twenty-ninth, NW   | K                            | M                            | Cobble                          |
| Do                 | M                            | N                            | Granite                         |
| Do                 | N                            | P                            | Asphalt                         |
| Do                 | P                            | Q                            | Asphalt, B. B.                  |
| Do                 | Q                            | U                            | Macadam                         |
| Thirtieth, NW      | Virginia avenue              | K                            | Asphalt, H. B.                  |
| Do                 | K                            | Chesapeake and Ohio<br>Canal | Cobble                          |
| Do                 | Chesapeake and Ohio<br>Canal | M                            | Asphalt, H. B.                  |
| Do                 | M                            | N                            | Granite                         |
| Do                 | N                            | P                            | Asphalt, H. B.                  |
| Do                 | P                            | Q                            | Asphalt, B. B.                  |
| Do                 | Q                            | U                            | Granite                         |
| Thirty-first, NW   | K                            | M                            | Coal tar                        |
| Do                 | M                            | N                            | Granite                         |
| Do                 | N                            | P                            | Asphalt                         |
| Do                 | P                            | U                            | Asphalt, H. B.                  |
| Do                 | P                            | U                            | Granite                         |
| Thirty-second, NW  | K                            | M                            | Cobble                          |
| Do                 | M                            | P                            | Granite                         |
| Do                 | M                            | N                            | do                              |
| Do                 | P                            | Thirty-fourth                | Cobble                          |
| Do                 | Thirty-fourth                | Thirty-fifth                 | Macadam                         |
| Do                 | Thirty-fifth                 | Tunlaw road                  | Granite                         |
| Thirty-third, NW   | K                            | M                            | Cobble                          |
| Do                 | M                            | N                            | Asphalt, B. B.                  |
| Do                 | N                            | P                            | Asphalt, H. B.                  |
| Do                 | P                            | Thirty-second                | Asphalt, B. B.                  |
| Thirty-fourth      | M                            | N                            | do                              |
| Do                 | N                            | P                            | do                              |
| Do                 | P                            | R                            | do                              |
| Do                 | R                            | Thirty-second                | Macadam                         |
| Thirty-fifth       | M                            | Prospect                     | Cobble                          |
| Do                 | Prospect                     | N                            | Asphalt, B. B.                  |
| Do                 | N                            | P                            | Coal tar                        |
| Do                 | P                            | Q                            | do                              |
| Do                 | Q                            | U                            | Asphalt, B. B.                  |
| Do                 | U                            | Tenallytown road             | Asphalt, H. B.                  |
| Thirty-sixth       | Prospect                     | O                            | Asphalt, B. B.                  |
| Do                 | O                            | P                            | Asphalt, H. B.                  |

NOTE.—H. B.=hydraulic base; B. B.=bituminous base.

with repairs to asphalt pavements to July 1, 1901—Continued..

| Year laid. | Square yards. | Price per square yard. | Original cost. | Resurfaced. |                       | Repairs—average annual cost per square yard. |                    |               | Remarks.                        |
|------------|---------------|------------------------|----------------|-------------|-----------------------|----------------------------------------------|--------------------|---------------|---------------------------------|
|            |               |                        |                | Year.       | Cost per square yard. | Prior to resurfacing.                        | Since resurfacing. | Current year. |                                 |
| 1874       | 5,192         | \$0.70                 | \$3,635.00     |             |                       |                                              |                    |               |                                 |
| 1900       | 2,456         | 1.78                   | 6,418.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1901       | 1,200         |                        |                |             |                       |                                              |                    |               |                                 |
| 1898       | 3,739         | 1.54                   | 9,129.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1890       | 1,163         | 2.00                   | 4,146.00       |             | 0                     | \$0.008                                      | 0                  | \$0.038       |                                 |
| 1890       | 1,693         | 2.00                   | 5,972.00       |             | 0                     | .006                                         | 0                  | .02           |                                 |
| 1874       | 5,042         | .70                    | 3,529.00       |             |                       |                                              |                    |               |                                 |
| 1882       | 1,680         | 2.48                   | 4,296.00       |             |                       |                                              |                    |               |                                 |
| 1877       | 919           | 2.67                   | 2,454.00       |             |                       | .023                                         |                    | .022          |                                 |
| 1898       | 4,100         |                        | 5,887.00       |             |                       |                                              |                    |               |                                 |
| 1894       | 2,879         | 1.16                   |                |             | 0                     | 0                                            | 0                  | 0             | {Cobble base.<br>1/4-inch base. |
| 1894       | 1,551         | 1.96                   | 11,260.00      |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1890       | 1,474         |                        | 3,737.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
|            | 2,350         |                        |                |             |                       |                                              |                    |               |                                 |
| 1874       | 2,919         |                        | 1,080.00       |             |                       |                                              |                    |               |                                 |
| 1882       | 1,885         | 2.46                   | 4,727.00       |             |                       |                                              |                    |               |                                 |
| 1893       | 2,966         |                        |                |             | 0                     | 0                                            | 0                  | 0             | On asphalt block.               |
| 1894       | 1,261         | 2.00                   | 3,381.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1890       | 2,300         |                        |                |             |                       |                                              |                    |               |                                 |
| 1875       | 1,617         | .70                    | 1,132.00       |             |                       |                                              |                    |               |                                 |
| 1879       | 1,116         | 1.76                   | 2,651.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1879       | 2,121         | 2.15                   | 4,425.00       |             |                       |                                              |                    |               |                                 |
| 1883       | 2,932         | 2.23                   | 7,961.00       |             |                       | .045                                         |                    | .054          |                                 |
| 1888       | 1,282         | 2.00                   | 3,515.00       |             |                       | .002                                         |                    | .009          |                                 |
| 1883       | 2,746         |                        | 10,204.60      |             |                       |                                              |                    |               |                                 |
| 1887       | 1,209         | 1.98                   | 5,514.00       |             |                       | .011                                         |                    | 0             | Do                              |
| 1880       | 1,742         | 1.81                   | 3,562.00       |             |                       |                                              |                    |               |                                 |
| 1893       | 3,338         |                        | 4,312.00       |             |                       |                                              |                    |               |                                 |
| 1885       | 1,862         | 2.26                   |                |             |                       |                                              |                    |               |                                 |
|            | 3,285         |                        |                |             |                       |                                              |                    |               |                                 |
|            | 3,000         |                        |                |             |                       |                                              |                    |               |                                 |
| 1879       | 6,202         | 2.15                   | 13,065.00      |             |                       |                                              |                    |               | Widening.                       |
| 1894       | 561           |                        | 2,620.00       |             |                       |                                              |                    |               |                                 |
|            | 8,500         |                        |                |             |                       |                                              |                    |               |                                 |
|            | 3,500         |                        |                |             |                       |                                              |                    |               |                                 |
| 1893       | 6,076         |                        | 24,075.00      |             |                       |                                              |                    |               |                                 |
| 1890       | 1,580         | 2.00                   | 5,800.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1883       | 2,050         | 2.27                   | 4,745.00       |             |                       | 0.75                                         |                    | .088          |                                 |
| 1890       | 4,675         | 2.00                   | 9,764.00       |             |                       | .0008                                        |                    |               |                                 |
| 1890       | 1,660         | 2.00                   | 4,958.00       |             | 0                     | 0                                            | 0                  |               |                                 |
| 1891       | 2,109         | 2.00                   | 7,927.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1890       | 2,264         | 2.00                   | 8,494.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1892       | 6,570         |                        | 8,984.00       |             |                       |                                              |                    |               |                                 |
|            | 850           |                        |                |             |                       |                                              |                    |               |                                 |
| 1890       | 1,017         | 2.00                   | 3,346.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1887       | 2,929         | 1.97                   | 8,164.00       |             |                       | .01                                          |                    | .003          |                                 |
| 1887       | 1,558         | 1.97                   | 5,305.00       | 1901        | \$1.86                | .066                                         |                    | 0             |                                 |
| 1890       | 5,749         | 2.00                   | 18,563.00      |             |                       | .004                                         |                    | .032          |                                 |
| 1891       | 6,009         | 2.25                   | 18,242.00      |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1891       | 2,368         | 2.00                   | 7,994.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |
| 1900       | 707           | 1.78                   | 2,663.00       |             | 0                     | 0                                            | 0                  | 0             |                                 |

TABLE F.—Repairs to concrete and asphalt pavements for year ending June 30, 1901.

| Street.                                                       | From—                       | To—        | New 6-inch hydraulic base. | Resurfacing.         | Vitrified block gutters. | Contract work.         | Extra work. | Material.          | Total cost.            | Original pavement.         | Year laid.   | Original contractor.                           |
|---------------------------------------------------------------|-----------------------------|------------|----------------------------|----------------------|--------------------------|------------------------|-------------|--------------------|------------------------|----------------------------|--------------|------------------------------------------------|
| Intersection La. avenue, 7th and C NW.                        | 17th                        | 18th       | Sq. yds.<br>2,702.16       | Sq. yds.<br>1,904.90 | Sq. yds.<br>313.10       | \$6,008.08<br>4,155.58 | \$515.52    | \$703.19<br>298.31 | \$7,287.60<br>4,453.72 | Asphalt block<br>Asphalt   | 1890<br>1884 | McKnight & Burne.<br>Barber Asphalt Paving Co. |
| 3d, NW.                                                       | B.                          | Va. ave.   | 5,327.97                   | 5,327.97             | 10,793.72                | 10,793.72              |             | 612.61             | 11,406.33              | do                         | 1884         | Do.                                            |
| 6th, NW.                                                      | N. Y. ave.                  | Mass. ave. | 2,963.18                   | 2,963.18             | 5,963.04                 | 5,963.04               |             | 384.48             | 6,347.52               | do                         | 1890         | J. S. Baldwin.                                 |
| 35th, NW.                                                     | P.                          | 2d         | 1,497.55                   | 1,497.55             | 2,922.28                 | 2,922.28               |             | 180.31             | 2,902.59               | Coal tar                   | 1887         | Barber Asphalt Paving Co.                      |
| A, NE.                                                        | 4th                         | 7th        | 29.32                      | 3,224.82             | 555.26                   | 6,108.56               |             | 529.07             | 6,637.63               | do                         | 1887         | Do.                                            |
| P, NW.                                                        | 17th                        | 18th       |                            | 3,224.82             | 433.56                   | 6,553.56               | 24.38       | 331.56             | 6,985.50               | Asphalt                    | 1884         | Do.                                            |
| 14th, NW.                                                     | T                           | Fla. ave.  |                            | 4,261.76             | 396.58                   | 8,723.77               |             | 332.06             | 9,115.83               | do                         | 1882         | A. L. Barber.                                  |
| 5th, NW.                                                      | F                           | G          | 127.94                     | 221.75               | 72.27                    | 866.46                 | 46.35       | 69.62              | 982.43                 | do                         | 1885         | Barber Asphalt Paving Co.                      |
| 29d, NW. (widening).                                          | L.                          | M          | 1,429.14                   | 441.75               | 300.40                   | 4,015.59               |             | 293.45             | 4,309.04               | Asphalt block              | 1886         | P. Maloney.                                    |
| G, NW. (widening).                                            | 5th                         | 6th        | 312.91                     | 590.34               | 132.13                   | 2,251.42               | 22.67       | 153.77             | 2,427.86               | Concrete                   | 1872         | Abbott Paving Co.                              |
| 14th, NW.                                                     | Fla. ave.                   | Euclid     | 2,397.70                   |                      | 324.94                   | 5,423.10               | 918.71      | 306.31             | 6,648.12               | Asphalt, 4 inch base.      | 1889         | Barber Asphalt Paving Co.                      |
| N, NW.                                                        | 21st.                       | N. H. ave. |                            | 643.41               | 114.00                   | 1,385.90               | 27.54       | 162.93             | 1,576.37               | Concrete                   | 1875         | W. C. Murdock.                                 |
| F, NE.                                                        | N. Cap.                     | Del. ave.  |                            | 3,004.39             | 381.18                   | 6,259.43               | 39.35       | 381.86             | 6,691.14               | Concrete, bituminous base. | 1888         | H. L. Cranford.                                |
| F, NE.                                                        | Del. ave.                   | 3d         | 4,281.62                   |                      | 611.37                   | 6,096.04               | 76.13       | 645.58             | 7,418.35               | do                         | 1886         | Do.                                            |
| S, NW.                                                        | 9th                         | 11th       |                            | 2,782.74             | 421.08                   | 3,257.00               | 86.48       | 420.46             | 3,743.94               | Coal tar                   | 1886         | Do.                                            |
| N, NW.                                                        | 16th                        | 17th       | 1,561.34                   | 163.18               | 227.81                   | 3,852.45               | 163.65      | 436.57             | 4,452.67               | Concrete                   | 1873         | C. E. Evans.                                   |
| 10th, NW.                                                     | R                           | S          |                            | 1,622.81             | 137.43                   | 1,825.38               |             | 160.51             | 1,985.89               | Coal tar                   | 1887         | H. L. Cranford.                                |
| B, NW.                                                        | Intersections 15th and 16th |            | 2,660.92                   |                      | 130.74                   | 5,340.04               | 630.32      | 283.97             | 6,254.33               | Rubble                     | 1874         | John O. Evans.                                 |
| Total                                                         |                             |            | 14,945.65                  | 31,382.20            | 6,165.10                 | 94,243.40              | 2,551.10    | 6,821.95           | 103,616.45             |                            |              |                                                |
| Salaries and inspection                                       |                             |            |                            |                      |                          |                        |             |                    | 12,891.53              |                            |              |                                                |
| Minor repairs:                                                |                             |            |                            |                      |                          |                        |             |                    | 116,507.98             |                            |              |                                                |
| 48,224.18 cubic feet asphalt surface laid, at 60 cents.       |                             |            |                            |                      |                          |                        |             |                    | 28,934.50              |                            |              |                                                |
| 35,917.68 cubic feet asphalt border laid, at 31 cents.        |                             |            |                            |                      |                          |                        |             |                    | 11,134.48              |                            |              |                                                |
| 48.20 cubic yards bituminous base, at \$3.                    |                             |            |                            |                      |                          |                        |             |                    | 144.60                 |                            |              |                                                |
| 2 manholes adjusted to grade, at \$1.90                       |                             |            |                            |                      |                          |                        |             |                    | 3.80                   |                            |              |                                                |
| 222.50 cubic feet asphalt surface burned and replaced, at \$1 |                             |            |                            |                      |                          |                        |             |                    | 222.50                 |                            |              |                                                |
| 0.34 cubic yard hydraulic base, at \$5                        |                             |            |                            |                      |                          |                        |             |                    | 1.70                   |                            |              |                                                |
| 4.67 square yards vitrified block gutter laid, at 60 cents    |                             |            |                            |                      |                          |                        |             |                    | 2.80                   |                            |              |                                                |
| Grand total                                                   |                             |            |                            |                      |                          |                        |             |                    | 40,454.38              |                            |              |                                                |
|                                                               |                             |            |                            |                      |                          |                        |             |                    | 156,962.36             |                            |              |                                                |

TABLE E.

| Street.                              | From—                 | To—                       | Kind of pavement.   | No. of<br>con-<br>tract. | Square<br>yards. | Length.      | Price<br>per<br>yard. | Ordinary<br>grading. |
|--------------------------------------|-----------------------|---------------------------|---------------------|--------------------------|------------------|--------------|-----------------------|----------------------|
|                                      |                       |                           |                     |                          |                  | <i>Feet.</i> |                       | <i>Cu. yards.</i>    |
| Third .....                          | Q .....               | Florida avenue .....      | Asphalt .....       | 2808                     | 1,912.88         |              | \$1.795               | 790                  |
| Do .....                             | R .....               | do .....                  | do .....            | 2357                     | 449.92           | 731          | 1.78                  | 420                  |
| First .....                          | New York avenue ..... | O .....                   | do .....            | 2808                     | 2,342.58         | 621          |                       | 482                  |
| Do .....                             | A .....               | Florida avenue .....      | do .....            | 2808                     | 918.51           | 303          | 1.795                 | 114                  |
| New York avenue .....                | Nineteenth .....      | Twenty-third .....        | Macadam .....       | 2806                     | 7,156            | 2,000        |                       | 6,125                |
| Eighteenth .....                     | D .....               | Virginia avenue .....     | do .....            | 2806                     | 1,664            | 550          |                       | 1,200                |
| Nineteenth .....                     | E .....               | do .....                  | do .....            | 2806                     | 2,411            | 900          |                       | 1,000                |
| Twentieth .....                      | E .....               | do .....                  | do .....            | 2806                     | 1,776            | 666          |                       | 300                  |
| Twenty first .....                   | E .....               | New York avenue .....     | do .....            | 2806                     | 990              | 371          |                       | 53                   |
| Twenty-second .....                  | Virginia avenue ..... | do .....                  | do .....            | 2806                     | 2,672            | 1,000        |                       | 696                  |
| D .....                              | Eighteenth .....      | Twentieth .....           | do .....            | 2806                     | 2,160            | 720          |                       | 1,200                |
| Fifteenth (special) .....            | V .....               | W .....                   | Asphalt .....       | 2808                     | 1,317.42         | 400          | 1.795                 | 200                  |
| G (special) .....                    | Sixth .....           | Fifteenth .....           | do .....            | 2774                     | 2,325.44         |              | 1.77                  | 2,725                |
| Acker .....                          | Sixth .....           | Seventh .....             | Asphalt block ..... | 2784                     | 1,703.31         | 620          | \$1.77                | 660                  |
| Fourth .....                         | D .....               | F .....                   | do .....            | 2784                     | 3,101.46         | 816          | 1.77                  | 1,155                |
| Fifth .....                          | D .....               | E .....                   | do .....            | 2784                     | 1,565.98         | 872          | 1.77                  | 360                  |
| Do .....                             | E .....               | F .....                   | do .....            | 2826                     | 1,647.40         | 340          |                       | 415                  |
| Eighth .....                         | L .....               | Florida avenue .....      | Macadam .....       | 2806                     | 1,130            |              |                       | 250                  |
| Ninth .....                          | I .....               | do .....                  | do .....            | 2806                     | 1,755            | 590          |                       | 2,000                |
| D .....                              | Ninth .....           | Thirteenth .....          | Asphalt .....       | 2808                     | 4,229.15         | 1,520        |                       | 1,480                |
| Ninth .....                          | E .....               | Pennsylvania avenue ..... | Asphalt .....       | 2808                     | 672.58           | 238          | \$1.795               | 60                   |
| E .....                              | Ninth .....           | Tenth .....               | do .....            | 2808                     | 963.41           | 312          | 1.795                 | 125                  |
| Pennsylvania avenue<br>(south side). | Eleventh .....        | Twelfth .....             | do .....            | 2808                     | 2,151.05         | 512          | 1.795                 | 100                  |
| K .....                              | South Capitol .....   | Second .....              | Macadam .....       | 2806                     | 4,182            | 1,550        |                       | 2,392                |
| L .....                              | do .....              | do .....                  | do .....            | 2806                     | 4,205            | 1,560        |                       | 2,245                |
| Hay .....                            | I .....               | N .....                   | do .....            | 2806                     | 4,325            | 1,575        |                       | 1,947                |
| Second .....                         | K .....               | L .....                   | do .....            | 2806                     | 804              | 275          |                       | 122                  |
| South Capitol .....                  | K .....               | M .....                   | Asphalt .....       | 2808                     | 2,623.59         | 641          | \$1.795               | 570                  |
| H .....                              | First .....           | Canal .....               | Macadam .....       | 2806                     | 1,137            | 450          |                       | 1,500                |
| I .....                              | do .....              | do .....                  | do .....            | 2806                     | 1,024            | 400          |                       | 700                  |
| Half .....                           | G .....               | N .....                   | do .....            | 2806                     | 4,574            | 1,900        |                       | 2,678                |
| R .....                              | Thirty-second .....   | 30 feet west .....        | Asphalt block ..... | 2784                     | 113.27           | 50           | \$1.77                | 41                   |
| Twenty-ninth .....                   | Second .....          | Road .....                | do .....            | 2784                     | 2,322.10         | 608          | 1.77                  | 748                  |
| Thirtieth .....                      | K .....               | Southward .....           | Asphalt .....       | 2808                     | 850.83           |              | 1.795                 |                      |

¹ Cost of macadam material.

TABLE E.—Schedule of work on streets and avenues for the year ending June 30, 1901.

## NORTHWEST SECTION.

| Kind of pavement. | No. of contract. | Contract work. |         |                 |                   |                  |                         |                     |                   |                      |                      |                    |                    |                 |                          | Material.        |                        |                         |                | Cost of material. | Cost of inspection. | Removing sewer traps, water boxes, trees, lamp-posts, etc. | Cost of extra work. | Amount of contract. | Total cost of street.                     | Name of contractor.       |
|-------------------|------------------|----------------|---------|-----------------|-------------------|------------------|-------------------------|---------------------|-------------------|----------------------|----------------------|--------------------|--------------------|-----------------|--------------------------|------------------|------------------------|-------------------------|----------------|-------------------|---------------------|------------------------------------------------------------|---------------------|---------------------|-------------------------------------------|---------------------------|
|                   |                  | Square yards.  | Length. | Price per yard. | Ordinary grading. | Macadam grading. | Hauled over 2,500 feet. | Old cobble removed. | Old curb removed. | Straight curb reset. | Circular curb reset. | Straight curb set. | Circular curb set. | Cobble gutters. | Vitrified block gutters. | Vitrified block. | 8 by 8, straight curb. | 6 by 20, straight curb. | Circular curb. |                   |                     |                                                            |                     |                     |                                           |                           |
| asphalt           | 2808             | 1,912.88       | Feet.   |                 | Cu. yards.        | Cu. yds.         | Cu. yds.                | Sq. yards.          | Feet.             | Feet.                | Feet.                | Feet.              | Sq. yards.         | Sq. yards.      | Number.                  | Feet.            | Feet.                  | Feet.                   |                | \$589.51          | \$160.00            |                                                            | \$27.90             | \$4,565.78          | \$5,360.37                                | Barber Asphalt Paving Co. |
| do                | 2857             | 449.92         | 731     | \$1.785         | 790               | 219              | 540                     | 31.55               | 9.42              | 473.62               | 9.46                 | 534.99             | 66.10              | 79.48           | 4,389                    | 475.04           | 417.59                 | 61.42                   | 9.42           | 589.51            | 128.00              | 85.84                                                      | \$4,565.78          | \$5,360.37          | Cranford Paving Co.                       |                           |
| do                | 2808             | 2,342.58       | 621     | 1.795           | 1,063.38          | 482              | 211                     | 287.78              | 377.66            | 48.80                | 377.66               | 47.03              | 385.58             | 17,200          | 1,004.35                 | 158.69           | 291.38                 | 47.05                   | 1,040.68       | 128.00            |                     |                                                            | 6,815.41            | 1,795.95            | Barber Asphalt Paving Co.                 |                           |
| do                | 2808             | 918.51         | 303     | 1.795           | 114               | 47               | 7                       | 128                 | 31                | 2,793.51             | 438.15               | 979.66             | 723.79             | 32.630          | 2,718.76                 |                  |                        | 9.42                    | 337.14         | 31.00             |                     |                                                            | 2,077.40            | 2,450.54            | D.                                        |                           |
| macadam           | 2806             | 7,156          | 2,000   |                 | 6,125             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                          | 15,000.19        |                        |                         | 696.99         |                   |                     |                                                            | 696.99              |                     | Day labor, spreading and rolling macadam. |                           |
| do                | 2806             | 1,661          | 550     |                 | 1,300             |                  |                         |                     |                   |                      |                      |                    | 1,151.17           | 69.96           | 555.88                   | 2,891.44         |                        |                         | 176.02         | 105.33            |                     |                                                            | 3,046.70            | 11,609.65           | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,411          | 900     |                 | 1,000             |                  | 1,080                   | 372                 | 236.45            | 1,363.23             | 63.81                | 742.62             |                    |                 |                          | 1,163.63         |                        | 36.00                   | 78.59          |                   |                     |                                                            | 897.08              | 2,351.32            | Day labor, spreading and rolling macadam. |                           |
| do                | 2806             | 1,776          | 666     |                 | 300               |                  |                         |                     |                   |                      |                      |                    | 236.84             |                 |                          | 1,686.21         |                        |                         | 40.00          |                   |                     |                                                            | 222.80              |                     | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 990            | 371     |                 | 53                |                  |                         |                     |                   |                      |                      |                    | 241.96             |                 |                          | 1,241.96         |                        |                         | 157.16         |                   |                     |                                                            | 1,116.05            | 3,692.06            | Day labor, spreading and rolling macadam. |                           |
| do                | 2806             | 1,776          | 666     |                 | 300               |                  |                         |                     |                   |                      |                      |                    | 236.84             |                 |                          | 1,686.21         |                        |                         | 40.00          |                   |                     |                                                            | 222.80              |                     | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 990            | 371     |                 | 53                |                  |                         |                     |                   |                      |                      |                    | 241.96             |                 |                          | 1,241.96         |                        |                         | 157.16         |                   |                     | 2.67                                                       | 159.50              | 3,882.96            | Day labor, spreading and rolling macadam. |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.00          |                   |                     |                                                            | 504.33              | 1,709.67            | Washington Asphalt Block and Tile Co.     |                           |
| do                | 2806             | 2,672          | 1,000   |                 | 696               |                  |                         |                     |                   |                      |                      |                    | 777.50             | 115.54          | 227.52                   | 1,382.24         |                        |                         | 84.            |                   |                     |                                                            |                     |                     |                                           |                           |

## NORTHEAST SECTION.

|               |      |          |       |        |       |       |       |        |          |          |          |          |          |          |          |        |          |           |           |                           |                           |           |                           |            |                                       |
|---------------|------|----------|-------|--------|-------|-------|-------|--------|----------|----------|----------|----------|----------|----------|----------|--------|----------|-----------|-----------|---------------------------|---------------------------|-----------|---------------------------|------------|---------------------------------------|
| asphalt block | 2784 | 1,703.31 | 620   | \$1.77 | 620   | 130   | 100   | 122    | 132      | 44.58    | 1,171.39 | 59.66    | 1,231.30 | 1,654.64 | 804.79   | 12.56  | 644.73   | 120.00    | 1,032.00  | \$771.16                  | \$70.00                   | \$10.00   | \$3,835.69                | \$4,686.85 | Washington Asphalt Block and Tile Co. |
| do            | 2784 | 3,101.46 | 816   | 1.77   | 1,155 | 510   | 1,095 | 730    | 950      | 138.01   | 1,649.02 | 59.66    | 1,231.30 | 1,654.64 | 804.79   | 12.56  | 644.73   | 120.00    | 1,032.00  | \$771.16                  | \$70.00                   | \$10.00   | \$3,835.69                | \$4,686.85 | Washington Asphalt Block and Tile Co. |
| do            | 2826 | 1,565.98 | 872   | 1.77   | 415   | 271   | 286   | 407.50 | 438.70   | 467.29   | 467.29   | 467.29   | 467.29   | 467.29   | 467.29   | 467.29 | 467.29   | 467.29    | 467.29    | 467.29                    | 467.29                    | 467.29    | 467.29                    | 467.29     | Washington Asphalt Block and Tile Co. |
| do            | 2826 | 1,647.40 | 872   | 1.77   | 415   | 271   | 286   | 407.50 | 438.70   | 467.29   | 467.29   | 467.29   | 467.29   | 467.29   | 467.29   | 467.29 | 467.29   | 467.29    | 467.29    | 467.29                    | 467.29                    | 467.29    | 467.29                    | 467.29     | Washington Asphalt Block and Tile Co. |
| macadam       | 2806 | 1,130    | 340   | 2.50   | 2.50  | 50    | 20    | 30.81  | 72.74    | 1,117.47 | 1,117.47 | 545.21   | 789.26   | 2,171.22 | 290.77   | 123.99 | 2,400.33 | 108.00    | 272.66    | \$28.61                   | 10,772.73                 | 13,582.33 | Barber Asphalt Paving Co. |            |                                       |
| do            | 2806 | 1,755    | 590   | 2.000  | 2,000 | 476   | 1,296 | 497.44 | 2,502.04 | 789.26   | 2,171.22 | 290.77   | 123.99   | 2,400.33 | 108.00   | 272.66 | \$28.61  | 10,772.73 | 13,582.33 | Barber Asphalt Paving Co. |                           |           |                           |            |                                       |
| asphalt       | 2808 | 4,239.15 | 1,520 | 1.480  | 300   | 1,600 | 625   | 1,296  | 497.44   | 2,502.04 | 789.26   | 2,171.22 | 290.77   | 123.99   | 2,400.33 | 108.00 | 272.66   | \$28.61   | 10,772.73 | 13,582.33                 | Barber Asphalt Paving Co. |           |                           |            |                                       |

## SOUTHEAST SECTION.

|         |      |          |       |         |     |     |     |       |        |        |       |          |          |        |       |          |        |          |          |          |            |            |                                                                                                                                                                                                                                                                                                                                                      |          |          |
|---------|------|----------|-------|---------|-----|-----|-----|-------|--------|--------|-------|----------|----------|--------|-------|----------|--------|----------|----------|----------|------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|
| asphalt | 2808 | 672.58   | 238   | \$1.795 | 60  | 100 | 160 | 303   | 56     | 27     | 28.21 | 467.25   | 943      | 144.11 | 6,200 | 495.00   | 43.96  | \$547.85 | \$38.00  | \$142.67 | \$1,801.02 | \$2,520.54 | Barber Asphalt Paving Co.<br>Do.<br>Do.                                                                                                                                                                                                                                                                                                              |          |          |
| do      | 2808 | 963.41   | 312   | 1.795   | 125 | 125 | 250 | 533   | 886.90 | 5.10   | 18.80 | 573.36   | 34.57    | 154.49 | 6,650 | 528.32   | 59.00  | 912.37   | 132.00   | 8.00     | 4,824.32   | 5,878.81   |                                                                                                                                                                                                                                                                                                                                                      |          |          |
| do      | 2808 | 2,151.05 | 512   | 1.795   | 100 | 200 | 200 | 750   |        | 7.30   |       | 1,014.45 |          | 135.62 | 6,251 | 527.52   |        |          |          | \$10.12  |            |            |                                                                                                                                                                                                                                                                                                                                                      |          |          |
| macadam | 2806 | 4,182    | 1,550 | 2,392   |     |     |     | 1,650 | 76     | 124.68 |       | 3,240.90 | 1,817.92 |        |       | 2,513.88 | 187.12 | {        | 2,916.86 |          |            | 535.10     | Day labor, spreading and rolling macadam.<br>Washington Asphalt Block and Tile Co.<br>Day labor, spreading and rolling macadam.<br>Washington Asphalt Block and Tile Co.<br>Day labor, spreading and rolling macadam.<br>Washington Asphalt Block and Tile Co.<br>Day labor, spreading and rolling macadam.<br>Washington Asphalt Block and Tile Co. |          |          |
| do      | 2806 | 4,265    | 1,500 | 2,245   |     |     |     | 1,000 | 319.50 | 212.15 |       | 3,492.96 | 1,735.51 |        |       | 2,403.91 | 198.61 | {        | 2,050.60 | 64.00    | 40.00      | 25.02      |                                                                                                                                                                                                                                                                                                                                                      | 1,915.19 | 7,546.77 |
| do      | 2806 | 4,325    | 1,575 | 1,947   |     | 500 |     |       |        |        |       | 3,175.53 | 1,675.36 |        |       | 2,850.10 | *      | {        | 2,994.75 | 88.00    | 8.00       | 73.21      |                                                                                                                                                                                                                                                                                                                                                      | 528.39   | 7,742.01 |
| do      | 2806 | 4,325    | 1,575 | 1,947   |     | 500 |     |       |        |        |       | 3,175.53 | 1,675.36 |        |       | 2,850.10 | *      | {        | 1,973.50 |          |            |            |                                                                                                                                                                                                                                                                                                                                                      | 2,000.07 | 7,742.01 |
| do      | 2806 | 804      | 275   | 122     |     | 415 |     |       |        |        |       | 272      | 414.91   |        |       | 264.49   |        | {        | 3,016.60 | 56.66    | 120.13     | 16.09      |                                                                                                                                                                                                                                                                                                                                                      | 485.69   | 7,670.21 |
|         |      |          |       |         |     |     |     |       |        |        |       |          |          |        |       |          |        |          | {        | 2,203.40 |            |            |                                                                                                                                                                                                                                                                                                                                                      | 1,771.64 |          |
|         |      |          |       |         |     |     |     |       |        |        |       |          |          |        |       |          |        |          | {        | 1,560.79 |            |            |                                                                                                                                                                                                                                                                                                                                                      | 73.76    |          |
|         |      |          |       |         |     |     |     |       |        |        |       |          |          |        |       |          |        |          | {        | 197.04   | 16.00      | 20.30      | 165.21                                                                                                                                                                                                                                                                                                                                               | 179.40   | 1,212.14 |

## SOUTHWEST SECTION.

|         |      |          |       |         |       |     |        |     |    |          |  |        |       |          |        |        |  |  |       |            |          |        |        |            |            |                                           |
|---------|------|----------|-------|---------|-------|-----|--------|-----|----|----------|--|--------|-------|----------|--------|--------|--|--|-------|------------|----------|--------|--------|------------|------------|-------------------------------------------|
| asphalt | 2808 | 2,623.59 | 641   | \$1.795 | 570   | 800 |        |     |    | 1,227.41 |  |        | 18.91 |          | 317.90 | 14,099 |  |  | 18.84 | { \$319.90 | \$164.00 |        |        | \$6,100.74 | \$6,581.61 | Barber Asphalt Paving Co.                 |
| macadam | 2806 | 1,137    | 450   |         | 1,500 |     | 473.90 |     | 25 | 478.60   |  | 498    | 59.69 | 473.90   |        |        |  |  | 37.48 | { 1936.94  |          |        |        | 113.15     |            | Day labor, spreading and rolling macadam. |
|         |      |          |       |         |       |     |        |     |    |          |  |        |       |          |        |        |  |  |       | { 35.61    |          |        | \$5.51 | 855.85     | 1,983.73   | Washington Asphalt Block and Tile Co.     |
| do      | 2806 | 1,024    | 400   |         | 700   |     | 400    | 236 | 25 | 713.94   |  | 368.40 | 46.47 | 400.02   |        |        |  |  | 37.68 | { 1843.83  | 36.67    |        |        | 119.95     |            | Day labor, spreading and rolling macadam. |
|         |      |          |       |         |       |     |        |     |    |          |  |        |       |          |        |        |  |  |       | { 35.80    | 26.67    |        | 250.29 | 647.37     |            | Washington Asphalt Block and Tile Co.     |
| do      | 2806 | 4,574    | 1,900 |         | 2,678 |     | 109    | 31  |    | 85.85    |  | 717.24 |       | 1,942.41 |        |        |  |  | 33.17 | { 3,679.23 |          |        |        | 629.21     |            | Day labor, spreading and rolling macadam. |
|         |      |          |       |         |       |     |        |     |    |          |  |        |       |          |        |        |  |  |       | { 31.51    | 60.00    | \$6.00 | 595.63 | 1,483.76   | 6,476.34   | Washington Asphalt Block and Tile Co.     |

## GEORGETOWN SECTION.

|               |      |          |     |        |     |     |     |       |       |          |       |        |       |        |          |       |            |         |          |         |          |          |                                              |
|---------------|------|----------|-----|--------|-----|-----|-----|-------|-------|----------|-------|--------|-------|--------|----------|-------|------------|---------|----------|---------|----------|----------|----------------------------------------------|
| asphalt block | 2784 | 143.27   | 50  | \$1.77 | 61  | 607 | 607 | 1,398 | 76.31 | 1,281.43 | 44.12 | 133.91 | 5.500 | 520.12 | 1,283.80 | 43.96 | \$1,005.69 | \$72.00 | \$129.38 | \$11.18 | \$270.12 | \$270.12 | Washington Asphalt Block and Tile Co.<br>Do. |
| do            | 2784 | 2,322.10 | 698 | 1.77   | 748 | 607 | 607 | 1,398 | 76.31 | 1,281.43 | 44.12 | 133.91 | 5.500 | 520.12 | 1,283.80 | 43.96 | \$1,005.69 | \$72.00 | \$129.38 | \$11.18 | \$270.12 | \$270.12 |                                              |
| asphalt       | 2808 | 850.83   | 275 | 1.795  | 428 | 428 | 428 | 428   | 428   | 428      | 428   | 428    | 428   | 428    | 428      | 428   | 428        | 428     | 428      | 428     | 428      | 428      |                                              |

2,563.00 surface.

222 bituminous base.

Cost of macadam material.

nd suburban streets for year ending June 30, 1901.

| e-<br>d. | Material.                  |                            |                       |                       |                    |                           |                |                             |                              |                   | Cost of<br>material.               | Cost of<br>inspection. | Cost of<br>extra<br>work.    | Amount of<br>contract.              | Cost of<br>day labor. | Total cost<br>of work.              | Name of contractor.                                       |
|----------|----------------------------|----------------------------|-----------------------|-----------------------|--------------------|---------------------------|----------------|-----------------------------|------------------------------|-------------------|------------------------------------|------------------------|------------------------------|-------------------------------------|-----------------------|-------------------------------------|-----------------------------------------------------------|
|          | Straight<br>curb<br>reset. | Circular<br>curb<br>reset. | Straight<br>curb set. | Circular<br>curb set. | Cobble<br>gutters. | Vit.<br>block<br>gutters. | Vit.<br>block. | 8 by 8<br>straight<br>curb. | 6 by 20<br>straight<br>curb. | Circular<br>curb. |                                    |                        |                              |                                     |                       |                                     |                                                           |
| et.      | Lin. feet.                 | Lin. feet.                 | Lin. feet.            | Lin. feet.            | Sq. yds.           | Sq. yds.                  | Number.        | Lin. feet.                  | Lin. feet.                   | Lin. feet.        |                                    |                        |                              |                                     |                       |                                     |                                                           |
| 40       | 121.10                     |                            | 1,153.95              |                       | 2,979<br>2,649     | 760.25                    | 36,435         | 992.69                      |                              | 192.70            | \$3,406.63<br>5,592.92<br>1,540.43 |                        | \$44.68<br>3,179.47<br>32.82 | \$5,584.69<br>3,179.47<br>12,280.46 | \$693.38              | \$9,684.70<br>8,817.07<br>13,989.71 | M. F. Talty.<br>Do.<br>Barber Asphalt Paving Co.          |
|          |                            |                            |                       |                       | 495.30             | 699.02                    | 31,000         |                             |                              |                   | 696.71<br>694.02<br>1,230.16       |                        |                              | 696.60<br>587.81<br>800.81          | 78.69                 | 13,412.90<br>13,002.82<br>3,349.34  | M. F. Talty.<br>Barber Asphalt Paving Co.<br>M. F. Talty. |
|          |                            |                            |                       |                       | 2,025              |                           |                |                             |                              |                   |                                    |                        |                              |                                     |                       |                                     | Matthew Myers.                                            |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   |                                    |                        |                              |                                     |                       |                                     | J. C. Regan.                                              |
|          | 3.90                       |                            | 189.90                |                       |                    | 849.63                    |                |                             |                              |                   | 709.21                             | -400.00                | 408.14                       | 15,563.71                           |                       | 17,201.06                           | Andrew Gleeson.                                           |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   |                                    |                        | 8.10                         | 18,963.56                           |                       | 18,971.66                           | Cranford Paving Co.                                       |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   |                                    |                        | 865.18                       |                                     | 460.88                | 1,330.06                            | R. A. Malone.                                             |
|          | 31.85                      |                            | 5,149                 |                       | 2,941.80           |                           |                | 5,040.06                    |                              | 117.73            | 4,000.97<br>3,915.92               |                        | 34.10                        | 22,336.80                           |                       | 37,193.87                           | Tait-Burrows Contracting Co                               |
|          |                            |                            |                       |                       | 252.20             |                           |                |                             |                              |                   |                                    |                        | 128.00                       | 5,600.39                            | 787.69                |                                     | (W. F. Brenzer.                                           |
|          |                            |                            |                       |                       | 302                |                           |                |                             |                              |                   |                                    |                        | 211.56                       | 3,327.28                            |                       | 3,620.34                            | M. F. Talty.                                              |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   | 274.92                             |                        | 12.42                        | 249.48                              | 48.69                 | 1,485.71                            | Lyons Brothers.                                           |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   | 4,711.30                           |                        |                              | 600.20                              |                       |                                     | (M. F. Talty.                                             |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   |                                    |                        |                              | 2,074.91                            | 875.68                | 7,061.80                            | Lyons Brothers.                                           |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   |                                    |                        |                              | 2,961.36                            |                       | 2,961.36                            | M. F. Talty.                                              |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   |                                    |                        |                              |                                     |                       |                                     | J. C. Regan.                                              |
|          |                            |                            |                       |                       |                    |                           |                |                             |                              |                   |                                    |                        |                              |                                     |                       |                                     | Barber Asphalt Paving Co.                                 |

<sup>2</sup> Cubic yards.

g roadways under permit system.

|  |  |  |  |  |  |        |        |  |  |  |        |  |          |       |          |                                       |
|--|--|--|--|--|--|--------|--------|--|--|--|--------|--|----------|-------|----------|---------------------------------------|
|  |  |  |  |  |  |        |        |  |  |  | 24.00  |  | 5,166.94 |       | 5,190.94 | Washington Asphalt Block and Tile Co. |
|  |  |  |  |  |  |        |        |  |  |  | 24.00  |  | 1,384.77 |       | 1,698.77 | Do.                                   |
|  |  |  |  |  |  |        |        |  |  |  | 176.00 |  | 105.00   |       | 7,619.05 | Do.                                   |
|  |  |  |  |  |  | 396.76 | 17,474 |  |  |  | 374.29 |  | 88.00    | 25.00 | 5,988.75 | Barber Asphalt Paving Co.             |

TABLE E—Continued.—Work on county roads and suburban streets for year ending June 30, 1901.

| Street.                                                                            | From—                              | To—                    | Kind of improvement. | No. of contract. | Contract work. |         |        |                   |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     | Material.   |                       |                        |                |
|------------------------------------------------------------------------------------|------------------------------------|------------------------|----------------------|------------------|----------------|---------|--------|-------------------|------------------|-------------------------|---------------------|-------------------|----------------------|----------------------|--------------------|--------------------|-----------------|---------------------|-------------|-----------------------|------------------------|----------------|
|                                                                                    |                                    |                        |                      |                  | Square yards.  | Length. | Price. | Ordinary grading. | Macadam grading. | Hauled over 2,500 feet. | Old cobble removed. | Old curb removed. | Straight curb reset. | Circular curb reset. | Straight curb set. | Circular curb set. | Cobble gutters. | Vit. block gutters. | Vit. block. | 8 by 8 straight curb. | 6 by 20 straight curb. | Circular curb. |
| Kenosaw avenue and Park drive.....                                                 |                                    |                        | Macadam .....        | 2839             | 8,208          | Feet.   |        | Cu. yds.          | Cu. yds.         | Cu. yds.                | Sq. yds.            | Lin. feet.        | Lin. feet.           | Lin. feet.           | Lin. feet.         | Lin. feet.         | Sq. yds.        | Sq. yds.            | Number.     | Lin. feet.            | Lin. feet.             | Lin. feet.     |
| Michigan avenue.....                                                               | North Capitol street.              | Lincoln avenue.        | do .....             | 2839             | 10,167         | 3,358   |        | 10,169            |                  | 2,500                   |                     |                   |                      |                      |                    |                    | 2,979           |                     |             |                       |                        |                |
| Eighteenth street extended and Cincinnati street, Columbia road to Rock Creek..... |                                    |                        | Asphalt .....        | 2808             | 5,181.42       | 1,590   | \$1.79 | 830               |                  | 3,468.56                |                     |                   |                      |                      |                    |                    | 2,649           |                     |             |                       |                        |                |
| Dozen avenue.....                                                                  |                                    |                        | Grading .....        | 2854             |                |         |        | 16,457            |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     | 760.25      | 36,435                | 992.60                 | 192.7          |
| Dozen street.....                                                                  | Brightwood avenue.                 | Eighth .....           | Macadam .....        | 2839             | 1,518          | 506     |        | 901               |                  | 421.92                  |                     |                   |                      |                      |                    |                    | 495.30          |                     |             |                       |                        |                |
| Dozen road.....                                                                    | Florida avenue.                    | Northward .....        | Asphalt .....        | 2911             | 5,379          | 1,396   | 1.80   | 1,250             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     | 699.02      | 31,000                |                        |                |
| Franklin .....                                                                     | Twenty-second and Twenty-fourth, 1 | lon subdivision.       | Macadam .....        | 2839             | 5,586          | 2,285   |        | 528               |                  |                         |                     |                   |                      |                      |                    |                    | 2,025           |                     |             |                       |                        |                |
| Connect .....                                                                      | venue, west of Rock Creek .....    |                        | Grading .....        | 2703             |                |         |        | 2,440             |                  | 1,394                   |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                |
| Streets in Woodbridge subdivision.....                                             |                                    |                        | do .....             | 2902             |                |         | .42    | 11,858            |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                |
| Nineteenth extended .....                                                          | Florida avenue .....               | Columbia road .....    | do .....             | 2711             |                |         | .29    | 8,770             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                |
| Eleventh extended .....                                                            | Florida avenue .....               | Lydecker avenue .....  | Asphalt .....        | 2657             | 4,243.06       | 1,318   |        | 14,600            |                  | 900                     |                     |                   | 40                   | 3.90                 |                    | 189.90             |                 | 849.63              |             |                       |                        |                |
| Twenty-seventh street.....                                                         | few Cut road .....                 | Tenallytown road ..... | Grading .....        | 2858             |                |         | .28    | 67,737            |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                |
| Can .....                                                                          | Connecticut avenue .....           | Woodley road .....     | do .....             | 2842             | 6,426          | 2,635   | .24    | 93,070            |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                |
| ry retaining wall, Cincinnati street to Woodley road .....                         |                                    |                        | Macadam .....        | 2839             |                |         |        | 2,114             |                  | 3,611.42                |                     |                   | 31.85                |                      | 5,149              |                    | 2,341.89        |                     |             | 5,040.06              | 117.7                  |                |
| Cent street.....                                                                   | Sixteenth, westward .....          |                        | Masonry .....        | 2885             | 2,595.76       |         | 5.24   | 422               |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                |
| Bennings .....                                                                     | and Anacostia road .....           |                        | Macadam .....        | 2839             | 709            |         | .290   | 165               |                  | 183                     |                     |                   |                      |                      |                    |                    | 252.20          |                     |             |                       |                        |                |
| Columbia .....                                                                     | Sherman avenue .....               | Thirteenth .....       | Grading .....        | 2828             | 3,167.00       | 3,300   | .28    | 3,215             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                |
|                                                                                    |                                    |                        | Asphalt .....        | 2406             |                |         |        | 12,875.50         |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                |
|                                                                                    |                                    |                        |                      | 2808             | 2,808.87       |         |        | 1,115             |                  | 29                      |                     | 29                |                      |                      |                    |                    |                 | 453.38              | 20,000      |                       |                        |                |

<sup>1</sup> \$12,000 paid from appropriation '99.<sup>2</sup> Cubic yards.TABLE E—Continued.—*ing roadways under permit system.*

|                     |                    |                    |                     |      |           |       |      |          |  |  |  |  |  |  |  |  |  |        |        |  |  |  |
|---------------------|--------------------|--------------------|---------------------|------|-----------|-------|------|----------|--|--|--|--|--|--|--|--|--|--------|--------|--|--|--|
| Baltimore .....     | Nineteenth .....   | Twentieth .....    | Asphalt block ..... | 2784 | 2,755.44  | 688   | 1.77 | 621      |  |  |  |  |  |  |  |  |  |        |        |  |  |  |
| Twentieth .....     | Baltimore .....    | Cincinnati .....   | do .....            | 2784 | 844.986   | 240   | 1.77 | 169      |  |  |  |  |  |  |  |  |  |        |        |  |  |  |
| Flagler place ..... | V .....            | Albany .....       | do .....            | 2784 | 3,269.684 | 1,200 | 1.77 | 4,361.94 |  |  |  |  |  |  |  |  |  |        |        |  |  |  |
| Street .....        | Phelps place ..... | Twenty-third ..... | Asphalt .....       | 2808 | 2,463.92  | 850   | 1.79 | 2,698    |  |  |  |  |  |  |  |  |  | 396.76 | 17,474 |  |  |  |



TABLE E—Continued.—Work on county roads and suburban streets for year ending June 30, 1901.

| Kind of improvement. | No. of contract. | Contract work. |         |        |                   |                  |                         |                     |                   |                      |                      |                    |                    |                 | Material.           |             |                       |                        | Cost of material. | Cost of inspection. | Cost of extra work. | Amount of contract. | Cost of day labor. | Total cost of work. | Name of contractor. |                              |                 |
|----------------------|------------------|----------------|---------|--------|-------------------|------------------|-------------------------|---------------------|-------------------|----------------------|----------------------|--------------------|--------------------|-----------------|---------------------|-------------|-----------------------|------------------------|-------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|------------------------------|-----------------|
|                      |                  | Square yards.  | Length. | Price. | Ordinary grading. | Macadam grading. | Hauled over 2,500 feet. | Old cobble removed. | Old curb removed. | Straight curb reset. | Circular curb reset. | Straight curb set. | Circular curb set. | Cobble gutters. | Vit. block gutters. | Vit. block. | 8 by 8 straight curb. | 6 by 20 straight curb. | Circular curb.    |                     |                     |                     |                    |                     |                     |                              |                 |
| Macadam              | 2839             | 8,208          | Feet.   |        | Cu. yds.          | Cu. yds.         | Cu. yds.                | Sq. yds.            | Lin. feet.        | Lin. feet.           | Lin. feet.           | Lin. feet.         | Lin. feet.         | Sq. yds.        | Sq. yds.            | Number.     | Lin. feet.            | Lin. feet.             | Lin. feet.        | \$3,406.63          |                     |                     | \$5,584.69         | \$883.38            | \$9,684.70          | M. F. Talty.                 |                 |
| do                   | 2839             | 10,167         | 3,450   |        | 3,250             |                  | 3,408.56                |                     |                   |                      |                      |                    |                    | 2,979           |                     |             |                       |                        |                   | 5,582.92            | \$44.68             |                     | 3,139.47           |                     | 8,817.07            | Do.                          |                 |
| Asphalt              | 2808             | 5,181.42       | 1,500   | \$1.79 | 830               | 804              |                         | 1,106               | 9.40              | 121.10               |                      |                    |                    | 2,649           |                     |             |                       |                        |                   | 1,540.43            | \$136.00            | 32.82               | 12,280.46          |                     | 13,980.71           | Barber Asphalt Paving Co.    |                 |
| Grading              | 2854             |                |         |        | 16,457            |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     | 760.25      | 36,435                | 992.69                 | 192.70            |                     |                     |                     | 3,772.25           |                     | 3,772.25            | Geo. B. Mullen.              |                 |
| Macadam              | 2839             | 1,518          | 506     |        | 901               |                  | 421.92                  |                     |                   |                      |                      |                    |                    | 495.30          |                     |             |                       |                        |                   | 636.71              |                     |                     | 696.60             | 78.69               | 1,412.90            | M. F. Talty.                 |                 |
| Asphalt              | 2911             | 5,379          | 1,366   | 1.80   | 1,250             |                  |                         | 70                  |                   |                      |                      |                    |                    |                 | 690.02              | 31,000      |                       |                        |                   | 664.02              | 250.50              | 1,455.20            | 10,633.10          |                     | 13,002.82           | Barber Asphalt Paving Co.    |                 |
| Macadam              | 2839             | 5,586          | 2,285   |        | 528               |                  |                         |                     |                   |                      |                      |                    |                    | 2,025           |                     |             |                       |                        |                   | 1,239.16            |                     |                     | 587.81             | 701.56              | 3,949.34            | M. F. Talty.                 |                 |
| Grading              | 2793             |                |         |        | 2,440             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   |                     |                     |                     | 800.81             |                     |                     | Matthew Myers.               |                 |
| do                   | 2902             |                |         |        | 42                |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   |                     |                     |                     | 4,980.36           |                     |                     | J. C. Regan.                 |                 |
| do                   | 2711             |                |         |        | 8,770             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   |                     |                     | 495.90              | 2,787.87           |                     | 8,264.13            | Geo. B. Mullen.              |                 |
| Asphalt              | 2957             | 4,243.06       | 1,318   |        | 14,000            | 900              |                         |                     | 40                | 3.90                 |                      |                    | 189.90             |                 | 849.63              |             |                       |                        |                   | 769.21              | 400.00              |                     | 468.14             |                     | 2,552.12            | Andrew Gleeson.              |                 |
| Grading              | 2856             |                |         |        | 67,727            |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   |                     |                     | 8.10                | 15,563.71          |                     | 17,301.06           | Cranford Paving Co.          |                 |
| do                   | 2858             |                |         |        | 3,101             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   |                     |                     |                     | 805.18             |                     | 18,951.66           | R. A. Malone.                |                 |
| Macadam              | 2842             | 6,426          | 2,635   | .24    | 93,070            |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   | 4,060.97            |                     | 34.10               | 22,386.80          |                     | 460.88              | Tait-Burrows Contracting Co. |                 |
| do                   | 2839             |                |         |        | 2,114             |                  | 3,653.42                |                     |                   | 31.85                |                      |                    | 5,149              | 2,341.89        |                     |             |                       | 5,040.06               | 117.73            |                     | 128.00              |                     | 787.69             |                     | 37,193.87           | W. F. Brenizer.              |                 |
| Masonry              | 2855             | 2,995.76       |         | 5.24   | 422               |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   | 5,690.39            |                     |                     | 5,690.39           |                     | 3,620.34            | Lyons Brothers.              |                 |
| Macadam              | 2839             | 709            | 290     |        | 165               |                  | 183                     |                     |                   |                      |                      |                    |                    | 252.20          |                     |             |                       |                        |                   | 274.92              | 181.50              | 211.56              | 3,227.28           |                     | 1,485.71            | M. F. Talty.                 |                 |
| Grading              | 2828             |                |         | .28    | 3,215             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   |                     |                     |                     | 12.42              | 48.69               |                     | 1,485.71                     | Lyons Brothers. |
| Macadam              | 2830             | 3,167.00       | 3,300   |        | 3,681             |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   | 4,711.30            |                     |                     | 2,074.91           |                     | 7,661.89            | M. F. Talty.                 |                 |
| Grading              | 2406             |                |         |        | 12,875.50         |                  |                         |                     |                   |                      |                      |                    |                    |                 |                     |             |                       |                        |                   |                     |                     |                     | 2,961.36           |                     | 2,961.36            | J. C. Regan.                 |                 |
| Asphalt              | 2808             | 2,808.87       |         |        | 1,115             | 29               |                         | 29                  |                   |                      |                      |                    |                    |                 | 453.38              | 20,000      |                       |                        |                   | 428.40              | 64.00               |                     | 6,133.29           |                     |                     | Barber Asphalt Paving Co.    |                 |

<sup>1</sup> \$12,000 paid from appropriation '99.

<sup>2</sup> Cubic yards.

TABLE E—Continued.—*bug roadways under permit system.*

|               |      |           |       |      |          |  |  |  |  |  |  |  |  |  |        |        |  |  |  |        |        |        |          |  |          |                                       |
|---------------|------|-----------|-------|------|----------|--|--|--|--|--|--|--|--|--|--------|--------|--|--|--|--------|--------|--------|----------|--|----------|---------------------------------------|
| Asphalt block | 2784 | 2,755.44  | 688   | 1.77 | 621      |  |  |  |  |  |  |  |  |  |        |        |  |  |  |        | 24.00  |        | 5,166.94 |  | 5,190.94 | Washington Asphalt Block and Tile Co. |
| do            | 2784 | 844,986   | 240   | 1.77 | 169      |  |  |  |  |  |  |  |  |  |        |        |  |  |  |        | 24.00  |        | 1,584.77 |  | 1,608.77 | Do.                                   |
| do            | 2784 | 3,291,684 | 1,200 | 1.77 | 4,361.94 |  |  |  |  |  |  |  |  |  |        |        |  |  |  |        | 176.00 | 105.00 | 7,338.05 |  | 7,619.05 | Do.                                   |
| Asphalt       | 2808 | 2,463.92  | 850   | 1.79 | 2,698    |  |  |  |  |  |  |  |  |  | 396.76 | 17,474 |  |  |  | 374.29 | 88.00  | 25.00  | 5,988.75 |  | 6,476.94 | Barber Asphalt Paving Co.             |

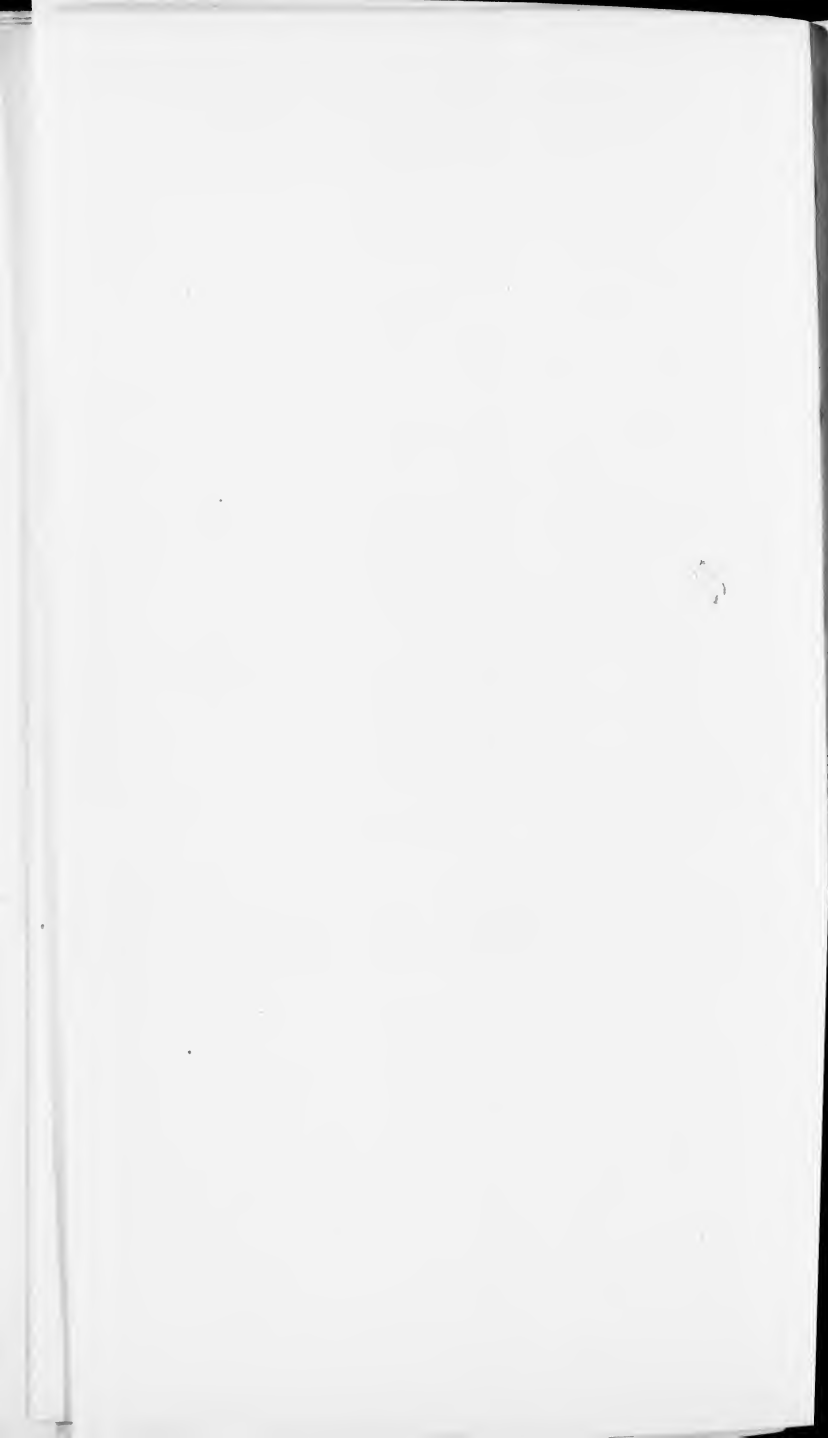


TABLE G.—Repairs to concrete and asphalt pavements at cost of railroad companies.

| Companies.                    | Street.                                          | From—               | To—                  | Amount. |
|-------------------------------|--------------------------------------------------|---------------------|----------------------|---------|
| City and Sub-urban.           | R, NE                                            | First               | Third                | \$2.73  |
|                               | North Capitol and K, NW                          |                     |                      | 4.20    |
|                               | North Capitol and New York avenue                |                     |                      | 3.64    |
|                               | Sixth and Pennsylvania avenue                    |                     |                      | 4.24    |
|                               | Massachusetts avenue and G, NW                   |                     |                      | 3.64    |
|                               | G, NW                                            | Second              | Fourth               | 2.73    |
|                               | North Capitol                                    | I                   | K                    | 4.55    |
|                               | Sixth and G, NW                                  |                     |                      | .91     |
|                               |                                                  |                     |                      | 26.64   |
|                               |                                                  |                     |                      |         |
| Anacostia and Potomac River.  | Second and H, SW                                 |                     |                      | 2.73    |
|                               | O, NW                                            | Fourth              | Eleventh             | 53.76   |
|                               | First and Maryland avenue, SW                    |                     |                      | 3.19    |
|                               | Second, SW                                       | C                   | Virginia avenue      | 1.36    |
|                               | Third and T, NE                                  |                     |                      | 2.73    |
|                               | Fourth and H and Fourth and Massachusetts avenue |                     |                      | 23.66   |
|                               | Fourteenth, NW                                   | Pennsylvania avenue | B                    | 2.73    |
|                               |                                                  |                     |                      | 90.16   |
| Metropolitan                  | Tenth and F, NW                                  |                     |                      | 4.55    |
|                               | Connecticut avenue                               | R                   | S                    | .60     |
|                               | Fifteenth and H, NW                              |                     |                      | 4.55    |
|                               | Ninth and Pennsylvania avenue, NW                |                     |                      | 1.82    |
|                               | Ninth and H, NW                                  |                     |                      | 1.82    |
|                               | Thirty-sixth and O, NW                           |                     |                      | 1.82    |
|                               | B, NE                                            | First               | Second               | 3.66    |
|                               | Four-and-a-half                                  | Missouri avenue     | Maryland avenue      | 10.01   |
|                               | Ninth and M, NW                                  |                     |                      | .91     |
|                               | Connecticut avenue                               | K                   | Dupont circle        | 1.82    |
|                               | Ninth                                            | New York avenue     | Massachusetts avenue | 15.16   |
|                               | Fourteenth                                       | F                   | New York avenue      | 2.73    |
|                               | D, NW                                            | New Jersey avenue   | First                | 2.73    |
|                               | Second and East Capitol                          |                     |                      | .91     |
| Eckington and Soldiers' Home. |                                                  |                     |                      | 53.09   |
|                               | Sixth and Pennsylvania avenue, NW                |                     |                      | 1.82    |
| Capital Traction              | Pennsylvania avenue, NW                          | Thirteenth          | Fourteenth           | 3.64    |
|                               | do                                               | Fourteenth          | Fifteenth            | 3.64    |
|                               | do                                               | Fifteenth           | Twenty-fourth        | 16.84   |
|                               | do                                               | Tenth               | Thirteenth           | 1.36    |
|                               | do                                               | Twenty-fourth       | Twenty-sixth         | 10.01   |
|                               | Pennsylvania avenue, SE., intersection Fifth     |                     |                      | .91     |
|                               | Twenty-sixth                                     | Pennsylvania avenue | M                    | 7.28    |
|                               | Fourteenth and Rhode Island avenue               |                     |                      | 3.00    |
|                               | Thirty-first and M                               |                     |                      | 1.36    |
|                               | M                                                | Bridge              | Thirty-first         | 18.20   |
| Columbia                      |                                                  |                     |                      | 66.24   |
|                               | H, NE                                            | North Capitol       | Fifteenth            | 52.33   |
|                               | H, NW                                            | Third               | Fourth               | 22.29   |
|                               | Massachusetts avenue                             | Fourth              | Seventh              | 24.11   |
|                               | New York avenue                                  | Tenth               | Fifteenth            | 12.74   |
|                               | Thirteenth and New York avenue                   |                     |                      | 4.10    |
|                               |                                                  |                     |                      | 115.57  |

TABLE H.—Work done by day labor under the appropriation for "Current repairs to streets, avenues, and alleys," from July 1, 1900, to June 30, 1901.

|                              |              |             |
|------------------------------|--------------|-------------|
| Brick sidewalk laid          | square yards | 2,438       |
| Brick sidewalk relaid        | do           | 17,196      |
| Asphalt block paved          | do           | 731         |
| Asphalt block repaved        | do           | 578         |
| Vitrified brick repaved      | do           | 811         |
| Vitrified block paved        | do           | 549         |
| Vitrified block repaved      | do           | 604         |
| Cobble paved                 | do           | 10,523      |
| Curb set                     | linear feet  | 573         |
| Curb reset                   | do           | 3,037       |
| Flag relaid                  | do           | 3,827       |
| Granite block relaid         | square yards | 1,701       |
| Asphalt-tile sidewalk relaid | do           | 1,008       |
| Cement sidewalk              | do           | 531         |
| Grading                      | cubic yards  | 7,562       |
| Graveling                    | do           | 10,165      |
| Labor                        | square yard  | \$24,734.77 |
| Material                     |              | 1,657.32    |

TABLE I.—

| No.  | Location.                                                                    | For whom done.                       | Grading.        | Cement sidewalk. | Curb reset.     |
|------|------------------------------------------------------------------------------|--------------------------------------|-----------------|------------------|-----------------|
|      |                                                                              |                                      | <i>Cu. yds.</i> | <i>Sq. yds.</i>  | <i>Lin. ft.</i> |
| 2001 | 2121 Massachusetts avenue NW.....                                            | Carl F. Grieshaber .....             |                 | 342.12           |                 |
| 2002 | Adams Mill road to east line Capital Traction Company.                       | T. J. Fisher & Co .....              | 52              | 761.02           |                 |
| 2003 | North side Whitney avenue NW., between Holmead avenue and Fourteenth street. |                                      |                 |                  |                 |
| 2003 | West side Holmead avenue, between Lydecker and Whitney avenues.              | W. F. Mattingly .....                | 1,277           |                  | 43.57           |
| 2003 | South side Lydecker avenue, between Fourteenth street and Holmead avenue.    |                                      |                 |                  |                 |
| 2004 | Eighteenth street NW., rear 1533 New Hampshire avenue.                       | Ralph L. Galt .....                  |                 | 43.68            |                 |
| 2005 | 1400 Fourteenth street NW .....                                              | F. W. Huddleson .....                |                 | 75.49            | (0)             |
| 2006 | 214, 216 B street SE .....                                                   | Theo. J. Mayer .....                 |                 | 47.97            | 36.50           |
| 2007 | 220 B street SE .....                                                        | H. C. McCauley .....                 |                 | 47.21            | 31              |
| 2008 | 1906 Cincinnati street NW .....                                              | J. M. Kenyon .....                   |                 | 18.18            | 31.74           |
| 2009 | 30 Patterson street .....                                                    | F. Keffner .....                     |                 | 9.58             | 31              |
| 2010 | Connecticut avenue and Cincinnati street, intersection.                      | Thos. E. Waggaman .....              |                 |                  |                 |
| 2011 | 306 C street NW .....                                                        | Helen McIlvaine .....                |                 | 27.37            | 34              |
| 2012 | Thirteenth street, corner Hartford, Brookland.                               | James F. McHugh .....                | 170             | 103.40           |                 |
| 2013 | 218 B street SE .....                                                        | Theo. J. Mayer .....                 |                 | 35.23            | 30              |
| 2014 | 1449 Huntington place .....                                                  | Mrs. M. L. Pryor .....               |                 | 17.34            | 22              |
| 2015 | South side V street NW., from First street.                                  | W. J. Palmer .....                   |                 |                  |                 |
| 2016 | Quincy, Richmond, Seventh streets and New Hampshire avenue.                  | B. H. Warner & Co .....              | 38              | 572.76           |                 |
| 2019 | South side O street NE., from North Capitol street, east.                    | E. B. Moore .....                    |                 | 455.66           |                 |
| 2026 | 1629 Twenty-first street NW .....                                            | J. J. Byrne .....                    |                 | 187.95           | 160             |
| 2021 | 510 I street NW .....                                                        | P. M. Dubant .....                   |                 | 5.94             |                 |
| 2022 | 1416 and 1418 Twenty-first street NW.                                        | C. E. Compton .....                  |                 | 45.94            | 4.75            |
| 2023 | Lots 104 to 108, inclusive, square 669.                                      | Geo. W. Montgomery .....             |                 | 98.40            |                 |
| 2024 | 1414 Twenty-first street NW .....                                            | C. E. Compton .....                  |                 | 23.20            |                 |
| 2025 | Sixth street NW., between Florida avenue and T street.                       | J. F. Allison .....                  |                 | 27.12            | 80              |
| 2026 | 2548 University place .....                                                  | Wm. E. Boulter .....                 |                 | 29.12            |                 |
| 2027 | Corner Third and N streets SE .....                                          | John T. Webster .....                |                 | 88.13            | 13              |
| 2028 | 473, 475, 477, and 479 E street SW .....                                     | B. Leonard .....                     |                 | 65.62            | 74.40           |
| 2029 | 1211 S street NW .....                                                       | F. Schafhirt .....                   |                 | 20.69            | 21.10           |
| 2030 | 312, 314 Thirteenth street NW .....                                          | A. G. Yount .....                    |                 | 30.08            |                 |
| 2031 | 306 to 314, inclusive, N street SE.                                          | John T. Webster .....                |                 | 74.66            |                 |
| 2032 | Grace street, between Potomac and Thirty-second streets NW.                  | Capital Traction Co. ....            |                 | 169.55           | 247             |
| 2033 | 213, 215, 217, and 219 Wilson street.                                        | B. H. Warner .....                   |                 |                  |                 |
| 2034 | 122 to 154, inclusive, Thomas street                                         | Collins & Gaddis .....               |                 |                  |                 |
| 2035 | Corner Pierce and North Capitol streets (Sibley Hospital).                   | A. H. Ames .....                     |                 | 54.94            | 20.60           |
| 2036 | West side Kentucky avenue SE., between Fourteenth and E streets.             | American Security and Trust Co. .... | 121             |                  | 75              |
| 2037 | 2332 to 2338 Massachusetts avenue NW.                                        | Chas. W. King .....                  |                 |                  | 87              |
| 2038 | Twelve and a half street NE., between B and C streets.                       | S. Carr .....                        |                 |                  |                 |
| 2039 | 1733 R street NW .....                                                       | Thos. E. Waggaman .....              | 45              |                  | 12              |
| 2040 | Alley, square 1010, between B and C, Twelfth and Thirteenth streets NE.      | S. Carr .....                        | 80              |                  |                 |
| 2041 | 1542 Fifteenth street NW .....                                               | M. H. Pilling .....                  |                 | 39.40            | 77.40           |
| 2042 | East side Sixteenth street NE., between East Capitol and A streets.          | H. G. Wagner .....                   |                 |                  |                 |
| 2043 | Lots 181 to 184, Lanier Heights .....                                        | B. H. Warner & Co .....              |                 |                  |                 |
| 2044 | South side V street NW., to North Capitol street.                            | W. J. Palmer .....                   |                 |                  |                 |
| 2045 | 457 and 459 H street SW .....                                                | H. B. Lansdale .....                 |                 | 30.55            | 29              |

*Regular permit.*

[illegible]

TABLE I.—Regular

| No.  | Location.                                                                     | For whom done.                  | Grading.        | Cement sidewalk. | Curb reset.     |
|------|-------------------------------------------------------------------------------|---------------------------------|-----------------|------------------|-----------------|
|      |                                                                               |                                 | <i>Cu. yds.</i> | <i>Sq. yds.</i>  | <i>Lin. ft.</i> |
| 2046 | Alley, square 289, F and G, Twelfth and Thirteenth streets NW.                | American Security and Trust Co. | 14              |                  |                 |
| 2047 | Lots 5 and 6, block 15, Woodridge                                             | C. W. Brown                     |                 | 118.83           |                 |
| 2048 | Corner Thirty-fifth and K streets NW.                                         | Ed. Schneider                   |                 | 339.68           |                 |
| 2049 | Massachusetts avenue and Twenty-second street NW.                             | Paul J. Peltz                   |                 |                  |                 |
| 2050 | 314 C street NW                                                               | Louis Kimmel                    |                 | 26.36            | 21.70           |
| 2051 | 1210 D street NW                                                              | D. A. Sanford                   |                 | 79.29            | 61              |
| 2052 | Woodley road and Idaho street                                                 | J. N. McGill                    |                 |                  |                 |
| 2053 | 1611 Twenty-ninth street NW                                                   | D. L. Wilson                    |                 | 45.62            |                 |
| 2054 | 1026, 1028 Eighth street NW                                                   | Emmons S. Smith                 |                 | 39.71            |                 |
| 2055 | Northwest corner Seventh and D streets NW.                                    | Jas. G. Hill                    |                 | 223.71           |                 |
| 2056 | 1707 I street NW                                                              | Chas. W. Holmes                 |                 | 39.99            | 53              |
| 2057 | Rear 921 Pennsylvania avenue (D street NW).                                   | B. H. Warner & Co.              |                 | 34.28            |                 |
| 2058 | North Capitol and E streets NW                                                | W. H. Cissel & Son              |                 |                  |                 |
| 2059 | 1233 Twelfth street NW                                                        | Fred. B. Pyle                   |                 | 23.61            | 32.20           |
| 2061 | Corner Sixteen-and-a-half and N streets NW.                                   | Chas. A. Langley                |                 | 190.40           | 178             |
| 2063 | 1522 Twelfth street NW                                                        | Mrs. Wm. Linn                   |                 | 17.12            |                 |
| 2064 | West side Thirty-sixth street NW., from O street north.                       | John J. Horigan                 |                 | 128.10           |                 |
| 2066 | 1317, 1319 Massachusetts avenue NW                                            | Mrs. Woodbury                   |                 | 60               |                 |
| 2067 | 1109, 1111 G street NW                                                        | Jas. F. Scaggs                  |                 | 79.49            | 4.80            |
| 2068 | Northeast corner Tenth and G streets NW.                                      | Danl. Frazier                   |                 | 168.07           |                 |
| 2069 | 1321 Massachusetts avenue                                                     | Mrs. E. L. Wallan               |                 | 31.80            |                 |
| 2070 | North side N street from Ninth to Tenth street.                               | Wm. Henry                       |                 | 83.97            |                 |
| 2071 | 2135 R street NW                                                              | T. F. Jewell                    |                 | 28.97            | 12.20           |
| 2072 | Southwest corner Eighth and D streets NW.                                     | John S. Larcombe                |                 | 74.81            |                 |
| 2073 | South side Kenesaw avenue and Thirteenth street.                              | James E. Smith                  |                 | 106.97           |                 |
| 2074 | Southwest corner Seventh and M streets NW.                                    | A. B. Clark                     |                 | 116.97           | 102             |
| 2075 | Corner Fifteenth and R streets NW. (St. Paul's Church).                       | A. Brown                        |                 | 144.76           | 44              |
| 2077 | 1447 Huntington place NW                                                      | Hannah Pettitt                  |                 | 13.94            | 18              |
| 2078 | 1267 Rhode Island avenue NW                                                   | Mrs. A. C. Porter               |                 | 27.58            | 5.08            |
| 2079 | 734 Fifteenth street NW                                                       | T. B. Ferguson                  |                 | 106.33           | 53.60           |
| 2080 | Fifteenth street, between V and W streets NW. (St. Paul's Church).            | Jas. F. Markin                  |                 | 179.48           |                 |
| 2081 | West side Sixth street SW., between E and F streets.                          | T. Moran                        |                 | 363.79           | 367             |
| 2083 | 1503 Pennsylvania avenue NW                                                   | Cranford Paving Co.             |                 |                  |                 |
| 2084 | 414, 416, 418 Eighth street NW                                                | E. Burgdorf                     | 5               |                  |                 |
| 2085 | 1412, 1414 F street NW                                                        | Cranford Paving Co.             |                 |                  | 2               |
| 2087 | Southeast corner Ninth and I streets SE.                                      | S. Carr                         | 51              |                  | 52.20           |
| 2088 | 1324 K street NW                                                              | Dr. H. Krogstad                 |                 | 8.81             |                 |
| 2089 | Alley, block 7, Washington Heights                                            | Geo. S. Cooper                  | 304             |                  |                 |
| 2090 | Northwest corner Fourteenth and C streets SE.                                 | L. N. Saunders                  | 1.50            |                  |                 |
| 2091 | Northwest corner Fourteenth street and Pennsylvania avenue (Willard's Hotel). | Fred Drew                       |                 |                  |                 |
| 2092 | 412 Fifth street NW                                                           | Geo. E. Hamilton                |                 |                  |                 |
| 2093 | Thirteenth street, between N and O streets (Iowa Apartment House).            | A. H. McLaughlin                |                 | 150.26           | 3.70            |
| 2094 | East side Champlain avenue, north of Florida avenue.                          | Margt. A. O. Srier              | 2               |                  | 8               |
| 2095 | 1140 Fifteenth street NW                                                      | American Security and Trust Co. |                 | 20.00            | 5.90            |
| 2096 | 1326, 1328 Nineteenth street NW                                               | R. D. Jewett                    | 2               |                  | 5               |

*permit*—Continued.

[illegible]

TABLE I.—Regular

| No.  | Location.                                                                       | For whom done.                   | Grading.        | Cement sidewalk. | Curb reset.     |
|------|---------------------------------------------------------------------------------|----------------------------------|-----------------|------------------|-----------------|
|      |                                                                                 |                                  | <i>Cu. yds.</i> | <i>Sq. yds.</i>  | <i>Lin. ft.</i> |
| 2097 | 129 Indiana avenue NW .....                                                     | W. H. Wills .....                |                 | 24.21            | 20.60           |
| 2098 | 1471, 1473, 1475 Park street .....                                              | Chas. W. King .....              |                 | 30.56            |                 |
| 2099 | 49 I street NW .....                                                            | T. A. Rober .....                |                 | 59.40            | 48              |
| 2100 | Eighth street NW., between D and E streets.                                     | S. Dana Lincoln .....            |                 | 90.15            |                 |
| 2101 | First street NW., between Bates and P streets.                                  | Thos. L. Rishiell .....          |                 | 61.60            | 51.90           |
| 2102 | Southwest corner Thirteenth and E streets (Southern Rwy Co.).                   | R. B. Pegram .....               |                 | 282.85           | 89.20           |
| 2103 | 1696 and 1698 Thirty-first street .....                                         | John Leitch .....                |                 | 41.61            | 64              |
| 2104 | C street NW., between Thirteen-and-a-half and Fourteenth streets.               | C. C. Willard .....              |                 |                  | 137             |
| 2105 | East side School street, north to Park street.                                  | A. B. Jamison .....              |                 | 200.57           |                 |
| 2106 | Evarts place NW., between Twenty-seventh street and Connecticut avenue.         | H. P. Waggaman .....             |                 |                  |                 |
| 2107 | 221, 223, and 225 Pennsylvania avenue SE.                                       | Theo. J. Mayer .....             |                 | 87.09            | 75              |
| 2108 | 705 and 707 K street NW .....                                                   | Wm. Schwing .....                |                 | 6.83             |                 |
| 2109 | East side Buckingham place, west of Twentieth street.                           | H. P. Waggaman .....             |                 |                  |                 |
| 2110 | West side Twenty-fourth street, Langdon, between Emporia and Frankfort streets. | J. J. Baker .....                |                 | 217.17           |                 |
| 2111 | 1505 Rhode Island avenue NW .....                                               | Geo. W. Baird .....              |                 | 26.77            |                 |
| 2112 | Southwest corner Fourteenth street and New York avenue NW.                      | Davidson & Davidson .....        | 8               |                  |                 |
| 2113 | 935 Fourth street NW .....                                                      | Chas. H. Goeckler .....          |                 | 18.20            |                 |
| 2115 | 310 C street NW .....                                                           | D. A. Sanford .....              |                 | 50.24            | 51.40           |
| 2116 | Northwest corner Twenty-first and Q streets NW.                                 | D. C. Phillips .....             |                 | 230.41           |                 |
| 2118 | Tenth street NW., front of the "First Colored Society of New Jerusalem."        | Rev. Jas. E. Thomas .....        |                 | 40.38            |                 |
| 2119 | U street NW., between First and Second streets.                                 | Emma M. Gordon .....             |                 | 97.63            |                 |
| 2120 | West side Fourteenth street NW., south of Binney street.                        | F. E. Altamus .....              |                 | 31.53            |                 |
| 2121 | South side Cincinnati street, block 3, Cliffbourne.                             | Waddy B. Wood .....              |                 | 69.55            |                 |
| 2122 | South side Seaton street NW., between First and Second streets.                 | John M. Henderson .....          |                 | 193.89           |                 |
| 2123 | 1647 Thirtieth street NW .....                                                  | Rebecca Alexander .....          |                 |                  |                 |
| 2124 | 1410 Fifteenth street NW .....                                                  | H. Morrell .....                 |                 | 1.38             |                 |
| 2125 | 2100 E street NW .....                                                          | J. B. Lawler .....               |                 | 65.66            |                 |
| 2126 | Lots 2 and 3, block 4, Twining City .....                                       | Geo. J. T. Maisie .....          |                 |                  |                 |
| 2127 | 1923 I street NW .....                                                          | M. F. Finley .....               |                 | 45.76            |                 |
| 2128 | 1515 First street NW .....                                                      | J. B. Linton .....               |                 |                  |                 |
| 2129 | 1622 Twenty-first street NW .....                                               | R. C. Parker .....               |                 | 26.14            | 24.50           |
| 2130 | Southeast corner North Capitol and G streets.                                   | V. B. Johnson .....              |                 |                  | 10              |
| 2132 | 1318 and 1320 Twelfth street NW .....                                           | Thos. Jarvis .....               |                 | 7.33             |                 |
| 2133 | Southeast corner First and Bates streets NW.                                    | C. A. Read .....                 |                 | 18.83            | 5               |
| 2135 | B street SE., between Second and Third streets (Church of Reformation).         | Rev. W. E. Parsons .....         |                 | 51.30            |                 |
| 2136 | First and K streets NE .....                                                    | Union Trust and Storage Co. .... |                 | 123.84           |                 |
| 2137 | 310 K street NW .....                                                           | Louisa Goeckler .....            |                 | 28.09            | 28.80           |
| 2138 | 312 K street NW .....                                                           | C. J. Goeckler .....             |                 | 35.12            | 28.90           |
| 2139 | 312 Indiana avenue NW .....                                                     | W. H. Wills .....                |                 | 28.02            | 33.30           |
| 2146 | 209 Seventh street SW .....                                                     | Nixon Brewer .....               | 8               |                  |                 |
|      | Total .....                                                                     |                                  | 2,178.50        | 8,840.40         | 3,421.04        |



permut—Continued.

| Curb set.          |                   |          | Vitri-<br>fied<br>block<br>paved. | As-<br>phalt<br>block<br>paved. | Cob-<br>ble. | Flag<br>laid. | Flag<br>relaid. | Brick<br>side-<br>walk<br>paved. | Brick<br>side-<br>walk<br>re-<br>paved. | Con-<br>crete<br>base<br>laid. | Gran-<br>ite<br>blocks<br>re-<br>paved. | Cost.     |
|--------------------|-------------------|----------|-----------------------------------|---------------------------------|--------------|---------------|-----------------|----------------------------------|-----------------------------------------|--------------------------------|-----------------------------------------|-----------|
| 6 by 20<br>inches. | 8 by 8<br>inches. | Old.     |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         |           |
| Lin. ft.           | Lin. ft.          | Lin. ft. | Sq. yds.                          | Sq. yds.                        | Sq. yds.     | Lin. ft.      | Lin. ft.        | Sq. yds.                         | Sq. yds.                                | Cu. yds.                       | Sq. yds.                                |           |
| 50                 |                   | 4.40     |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | \$31.94   |
|                    | 3                 |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 93.25     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 75.70     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 100.80    |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 120.54    |
|                    | 35.70             |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 383.90    |
|                    |                   |          |                                   |                                 | 20           |               | 60              |                                  |                                         |                                |                                         | 58.28     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 30.08     |
| 267.47             |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 538.66    |
|                    | 1,165.41          |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 1,057.98  |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 113.42    |
| 781.60             |                   | 10       |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 12.19     |
|                    |                   | 377.45   |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 888.61    |
|                    | 20                |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 389.59    |
|                    | 273.10            |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 51.28     |
|                    |                   | 18.35    |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 370.87    |
|                    | 237               |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 24.40     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 64.83     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 524.27    |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 44.73     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 108.15    |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 34.92     |
| 240.63             |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 79.14     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 498.03    |
|                    |                   | 11       |                                   |                                 |              |               |                 |                                  | 10                                      |                                |                                         | 22.14     |
| 53.12              |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 2.46      |
| 115                |                   |          |                                   |                                 | 16           |               |                 | 90                               |                                         |                                |                                         | 158.00    |
|                    | 28.75             |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 59.32     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 54.27     |
|                    |                   | 9        |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 50.07     |
|                    |                   | 13.50    |                                   |                                 |              |               |                 |                                  | 4                                       |                                |                                         | 37.10     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 27.25     |
|                    | 14.98             |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 13.08     |
|                    | 58.57             |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 38.19     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 121.53    |
|                    | 103.48            |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 243.47    |
| 4.71               |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 43.46     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 43.49     |
|                    |                   | 30       |                                   |                                 |              |               |                 |                                  | 9                                       | 30                             |                                         | 37.37     |
|                    |                   |          |                                   |                                 |              |               |                 |                                  |                                         |                                |                                         | 63.13     |
| 2,761.59           | 7,371.43          | 550      | 414.50                            | 100                             | 68.83        | 2,003.6       | 60              | 1,016                            | 206                                     | 30                             | 1.50                                    | 24,360.13 |

TABLE K.—

| No.  | Location.                                                                                                                                                                                                                                       | Grading.        | Cement<br>side-<br>walk. | Curb<br>reset.  | Curb set.          |                   |                 |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|-----------------|--------------------|-------------------|-----------------|
|      |                                                                                                                                                                                                                                                 |                 |                          |                 | 6 by 20<br>inches. | 8 by 8<br>inches. | Old.            |
|      |                                                                                                                                                                                                                                                 | <i>Cu. yds.</i> | <i>Sq. yds.</i>          | <i>Lin. ft.</i> | <i>Lin. ft.</i>    | <i>Lin. ft.</i>   | <i>Lin. ft.</i> |
| 3001 | Alley, square 733, between First and Second, C and D streets SE.                                                                                                                                                                                | 254             |                          | 74              |                    |                   |                 |
| 3002 | Eighth street SE., from E to G street (both sides)                                                                                                                                                                                              |                 |                          |                 |                    | 528.85            |                 |
| 3003 | West side Harewood avenue NW., between Florida avenue and T street                                                                                                                                                                              |                 |                          |                 |                    | 203.21            |                 |
| 3005 | South side I street SE., between Twelfth and Georgia avenue                                                                                                                                                                                     |                 | 299.99                   |                 | 209.60             |                   |                 |
| 3006 | E street SE., from Sixth to Seventh street (both sides)                                                                                                                                                                                         |                 |                          | 31.60           | 1,247.80           |                   | 6.50            |
| 3007 | West side Second street SE., from north curb line of C street north                                                                                                                                                                             |                 | 121.83                   | 111             |                    |                   |                 |
| 3008 | West side Second street SE., from D to North Carolina avenue                                                                                                                                                                                    |                 | 246.41                   | 19              | 215.30             |                   |                 |
| 3009 | North Carolina avenue SE., from First to Second street                                                                                                                                                                                          |                 | 963.03                   |                 |                    |                   |                 |
| 3010 | South side L street SE., from Seventh street to 25-foot alley east                                                                                                                                                                              |                 | 180.46                   |                 |                    |                   |                 |
| 3011 | West side Fifteenth street SE., from A to B street                                                                                                                                                                                              |                 | 249.31                   |                 |                    |                   |                 |
| 3012 | South side A street SE., from Fourteenth to Fifteenth street                                                                                                                                                                                    |                 | 323.40                   |                 |                    |                   |                 |
| 3013 | North side A street and Massachusetts avenue SE., from Thirteenth to Fourteenth street                                                                                                                                                          |                 | 543.51                   |                 |                    |                   |                 |
| 3014 | East side Thirteenth street NE., between North Carolina avenue and B street                                                                                                                                                                     |                 | 516.48                   |                 |                    |                   | 5               |
| 3015 | Alley, square 670, between New York avenue, O, North Capital, and First streets NE.                                                                                                                                                             | 350             |                          |                 |                    |                   |                 |
| 3016 | Alleys in block 27, Isherwood                                                                                                                                                                                                                   |                 |                          |                 |                    |                   |                 |
| 3017 | Alley in square east of No. 1042                                                                                                                                                                                                                | 104             |                          | 108             |                    |                   |                 |
| 3018 | West side Twenty-second street NW., from K street north                                                                                                                                                                                         |                 | 142.00                   | 35.75           | 120.10             |                   |                 |
| 3019 | Alley, square 1005                                                                                                                                                                                                                              | 830             |                          | 30              |                    |                   |                 |
| 3020 | West side Vermont avenue NW., between L street and Thomas circle                                                                                                                                                                                |                 | 234.56                   | 218.20          |                    |                   | 11.40           |
| 3021 | West side Seventeenth street NW., from Grant to Lowell street                                                                                                                                                                                   |                 | 269.43                   |                 |                    |                   | 6               |
| 3023 | Wilson street, from Linden street (4) eastward                                                                                                                                                                                                  |                 |                          |                 |                    |                   |                 |
| 3041 | North side E street NE., from Third to Fourth street                                                                                                                                                                                            |                 | 446.03                   |                 |                    |                   |                 |
| 3042 | West side Fourteenth street NW., from Welling place to Euclid place                                                                                                                                                                             |                 | 359.89                   |                 |                    |                   |                 |
| 3043 | North side Florida avenue NW., between Le Droit and Harewood avenue                                                                                                                                                                             |                 | 521.14                   | 15              |                    | 537.20            |                 |
| 3044 | East side Fifth street NE., from E to F street                                                                                                                                                                                                  |                 | 438.43                   | 15.14           | 406.80             |                   |                 |
| 3047 | Joliet street, between Connecticut avenue and Zoological Park (both sides)                                                                                                                                                                      |                 |                          |                 | 492.10             |                   | 7.80            |
| 3048 | Joliet street, between Connecticut avenue and Zoological Park (both sides)                                                                                                                                                                      |                 | 519.31                   |                 |                    |                   |                 |
| 3050 | North side M street NW., from Twelfth to Thirteenth street                                                                                                                                                                                      |                 | 420.67                   |                 |                    |                   |                 |
| 3051 | South side P street NE., from North Capitol street to 15-foot alley east                                                                                                                                                                        |                 | 462.84                   |                 |                    |                   |                 |
| 3052 | West side Eighth street, from Quincy north; west side Eighth street, from Quincy south; east side Ninth, from Quincy street to 15-foot alley; east side Ninth, from Quincy street north; both sides Quincy street, from Eighth to Ninth streets | 80              | 1,015.57                 |                 | 1,579.11           |                   |                 |

### Assessment work.

[illegible]

TABLE K.—Assessment

| No.  | Location.                                                                       | Grading.        | Cement<br>side-<br>walk. | Curb<br>reset.  | Curb set.          |                   |                 |
|------|---------------------------------------------------------------------------------|-----------------|--------------------------|-----------------|--------------------|-------------------|-----------------|
|      |                                                                                 |                 |                          |                 | 6 by 20<br>inches. | 8 by 8<br>inches. | Old.            |
|      |                                                                                 | <i>Cu. yds.</i> | <i>Sq. yds.</i>          | <i>Lin. ft.</i> | <i>Lin. ft.</i>    | <i>Lin. ft.</i>   | <i>Lin. ft.</i> |
| 3053 | North side R street NW., between Fourteenth and Fifteenth streets.              |                 | 593.94                   |                 |                    |                   |                 |
| 3054 | East side Tennessee avenue, between East Capitol and B streets.                 | 25              | 317.17                   |                 |                    |                   |                 |
| 3055 | Both sides Vernon avenue NW., between Florida avenue and Nineteenth street.     |                 | 1,673.54                 |                 |                    |                   |                 |
|      | Both sides California avenue NW., between Florida avenue and Nineteenth street. |                 | 1,065.41                 |                 |                    |                   |                 |
| 3056 | South side Kenesaw avenue, west from Fourteenth street.                         | 9               | 118.95                   |                 | 136.85             |                   |                 |
| 3057 | South side Massachusetts avenue and I street NW., from Fourth to Fifth street.  |                 | 1,000.64                 | 661.70          |                    |                   | 84              |
| 3058 | Both sides North Capitol street from Michigan avenue south                      |                 |                          |                 | 4,082.70           |                   |                 |
| 3059 | Concord street, from Tenth to Thirteenth street.                                | 101             | 1,430.43                 |                 | 2,212.83           |                   |                 |
| 3060 | Newport place, from Twenty-first to Twenty-second street.                       |                 | 754.32                   |                 |                    |                   |                 |
| 3061 | Tenth street NE., between I and K streets (east side).                          |                 | 177.48                   |                 |                    | 21.40             |                 |
| 3062 | West side Nineteenth street, from Baltimore to Cincinnati street.               |                 | 303.85                   |                 |                    |                   |                 |
| 3064 | East side Twelfth street NE., from Rhode Island avenue south.                   | 52              | 285.37                   |                 |                    |                   |                 |
| 3065 | South side Kenyon street, from Thirteenth to Fourteenth street.                 | 107.60          | 606.75                   |                 |                    |                   |                 |
| 3066 | North side Q street, from Sixteenth to Seventeenth street.                      |                 | 327.90                   | 300             |                    |                   | 13              |
| 3067 | Alleys in square 1058                                                           | 1,443           |                          | 125.58          | 9.42               |                   |                 |
| 3068 | Northeast corner Nineteenth and Q streets NW.                                   |                 | 289.92                   | 36              | 138.49             |                   | 253.00          |
| 3069 | North side W street, from Fourteenth to Florida avenue.                         |                 | 644.38                   | 8.81            |                    |                   |                 |
| 3070 | South side U street, from Seventeenth street to New Hampshire avenue.           |                 | 484.10                   | 4.10            |                    | 33.20             |                 |
| 3071 | North side K street NE., from Eleventh to Twelfth street.                       |                 | 401.57                   |                 | 316.80             |                   | 32              |
| 3072 | East side Third street, Le Droit Park, Elm to Spruce street.                    |                 | 113.43                   |                 |                    | 127.53            |                 |
| 3073 | Both sides Callan street NE., from Sixth to Seventh street.                     |                 | 739.81                   | 14              | 1,257.60           |                   |                 |
| 3074 | South side Hanover street, between North Capitol and First street.              |                 | 100.24                   |                 | 139.72             |                   |                 |
| 3075 | West side First street NW., from Q to Florida avenue.                           |                 | 369.74                   |                 |                    | 349.02            |                 |
| 3077 | North side Q street, between Florida avenue and First street.                   |                 | 650.85                   | 20.35           |                    | 552.30            |                 |
| 3078 | North side Florida avenue NW., from Fifth to Sixth street.                      |                 | 434.63                   | 489             |                    |                   | 56              |
| 3079 | Both sides Nineteenth street extended, from Florida avenue to Columbia road.    |                 | 2,434.91                 |                 |                    | 2,176.37          |                 |
| 3080 | South side S street NW., from North Capitol to First street.                    |                 | 826.83                   | 746.33          | 9.42               |                   | 125             |
| 3081 | North side Kenesaw street NW., from Thirteenth to Fourteenth street.            | 106.57          | 911.22                   |                 |                    |                   | 21              |
| 3082 | Both sides Columbia street NW., from Thirteenth to Fourteenth street.           |                 | 1,696.42                 | 18              |                    |                   | 6               |
| 3083 | Both sides L street NE., from Seventh to Eighth street.                         |                 | 600.70                   | 25              |                    |                   |                 |
| 3084 | South side Hartford street, between Twelfth and Thirteenth street.              |                 | 367.13                   |                 |                    |                   |                 |

*work*—Continued.

[illegible]

TABLE K.—Assessment

| No.  | Location.                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Grading.        | Cement<br>side-<br>walk. | Curb<br>reset.  | Curb set.          |                   |                 |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|-----------------|--------------------|-------------------|-----------------|
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |                          |                 | 6 by 20<br>inches. | 8 by 8<br>inches. | Old.            |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <i>Cu. yds.</i> | <i>Sq. yds.</i>          | <i>Lin. ft.</i> | <i>Lin. ft.</i>    | <i>Lin. ft.</i>   | <i>Lin. ft.</i> |
| 3087 | East side First street NW., from<br>H to I.....                                                                                                                                                                                                                                                                                                                                                                                                              |                 | 359.88                   | 33.80           | 18.84              |                   | 60              |
| 3088 | Both sides Twentieth street, be-<br>tween Woodley road and south<br>property line, Cliffbourne.....                                                                                                                                                                                                                                                                                                                                                          | 860             | 1,351.03                 |                 |                    | 1,576.40          |                 |
| 3089 | West side Seventh street NE.,<br>from Galena to Hartford, and<br>east side Seventh street, Hart-<br>ford to Keokuk.....                                                                                                                                                                                                                                                                                                                                      | 400             | 826.62                   |                 |                    |                   |                 |
| 3091 | West side M street NW., from<br>Thirty-fourth to Thirty-fifth<br>street.....                                                                                                                                                                                                                                                                                                                                                                                 |                 | 456.65                   | 12              |                    |                   | 12              |
| 3092 | South side Virginia avenue NW.,<br>from Twenty-fourth street to<br>G street.....                                                                                                                                                                                                                                                                                                                                                                             |                 | 476.50                   |                 | 3.64               |                   | 20              |
| 3094 | West side Twenty-ninth street<br>NW., from Q street north.....                                                                                                                                                                                                                                                                                                                                                                                               |                 | 108.66                   |                 |                    |                   |                 |
| 3095 | Southside Dartmouth street NW.,<br>from Thirteenth eastward.....                                                                                                                                                                                                                                                                                                                                                                                             |                 | 402.50                   |                 | 575.05             | 31.42             |                 |
| 3096 | North side N street, from Ninth<br>to Tenth street NW.....                                                                                                                                                                                                                                                                                                                                                                                                   |                 | 500.81                   |                 |                    | 476.84            | 4               |
| 3097 | North side Madison street NW.,<br>between Seventeenth and<br>Eighteenth streets.....                                                                                                                                                                                                                                                                                                                                                                         |                 | 267.52                   |                 |                    |                   |                 |
| 3098 | East side Third street, Le Droit<br>Park, from Florida avenue<br>north to T.....                                                                                                                                                                                                                                                                                                                                                                             |                 | 686.50                   | 70              |                    | 682.17            |                 |
| 3099 | North side Park street NW.,<br>Mount Pleasant, S. P. Brown's<br>subdivision.....                                                                                                                                                                                                                                                                                                                                                                             |                 |                          |                 | 152.65             |                   |                 |
| 3100 | East side Brightwood avenue,<br>south side Chesapeake street,<br>and west side Illinois avenue,<br>block 3, Brightwood Park.....                                                                                                                                                                                                                                                                                                                             |                 | 376.93                   | 9               | 53.60              |                   |                 |
| 3102 | East side Thirty-sixth street<br>NW., from O to P street.....                                                                                                                                                                                                                                                                                                                                                                                                |                 | 308.40                   |                 |                    |                   |                 |
| 3101 | North and south sides Baltimore<br>street NW., front block 3, Cliff-<br>bourne.....                                                                                                                                                                                                                                                                                                                                                                          |                 | 1,435.51                 |                 |                    | 1,304.38          |                 |
| 3103 | West side Fourteenth street<br>NW., from Columbia road south.....                                                                                                                                                                                                                                                                                                                                                                                            |                 | 189.28                   |                 |                    |                   |                 |
| 3105 | Alley, square 744 (Francis plan).....                                                                                                                                                                                                                                                                                                                                                                                                                        |                 |                          |                 | 17.51              |                   |                 |
| 3106 | North side Dartmouth street NW.,<br>from Thirteenth eastward.....                                                                                                                                                                                                                                                                                                                                                                                            |                 | 372.01                   | 50              | 508.35             | 26.51             |                 |
| 3107 | North side T street NW., from Ver-<br>mont avenue to Eleventh street.....                                                                                                                                                                                                                                                                                                                                                                                    |                 | 254.43                   | 119             |                    |                   |                 |
| 3108 | Alleys, square 640.....                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                          |                 |                    |                   |                 |
| 3109 | South side E street NE., from<br>Third to Fourth.....                                                                                                                                                                                                                                                                                                                                                                                                        |                 | 441.78                   |                 |                    |                   |                 |
| 3111 | Alley, square 933, between Ninth<br>and Tenth, H and I, NE.....                                                                                                                                                                                                                                                                                                                                                                                              |                 |                          |                 |                    |                   |                 |
| 3112 | West side Fourteenth street SE.,<br>from East Capitol to A.....                                                                                                                                                                                                                                                                                                                                                                                              |                 | 239.71                   |                 |                    |                   |                 |
| 3113 | East side First street SE., from<br>B to C street.....                                                                                                                                                                                                                                                                                                                                                                                                       |                 | 558.65                   | 485.40          |                    | 70                |                 |
| 3116 | South side G street NW., Twen-<br>tieth to Twenty-first street.....                                                                                                                                                                                                                                                                                                                                                                                          |                 | 406.07                   | 382.50          |                    | 25                |                 |
| 3117 | Both sides First street NW., from<br>Rhode Island avenue to V<br>street.....                                                                                                                                                                                                                                                                                                                                                                                 |                 | 819.38                   |                 |                    |                   |                 |
| 3118 | North side Wyoming avenue, be-<br>tween Eighteenth and Nine-<br>teenth; south side Wyoming<br>avenue, between Eighteenth<br>and Nineteenth; south side Wy-<br>oming avenue, between Nine-<br>teenth and Columbia road;<br>north side California avenue,<br>between Eighteenth and Nine-<br>teenth; south side California<br>avenue, between Eighteenth<br>and Nineteenth; both sides Ver-<br>non street, between Eight-<br>eenth and Nineteenth streets..... |                 |                          |                 |                    | 837.02            |                 |

work—Continued.

| Vitrified<br>block<br>paved. | Asphalt<br>block<br>paved. | Cobble.         | Asphalt<br>tile re-<br>laid. | Flag<br>laid.   | Flag<br>relaid. | Brick<br>sidewalk<br>laid. | Brick<br>sidewalk<br>relaid. | Granite<br>block<br>laid. | Cost.    |
|------------------------------|----------------------------|-----------------|------------------------------|-----------------|-----------------|----------------------------|------------------------------|---------------------------|----------|
| <i>Sq. yds.</i>              | <i>Sq. yds.</i>            | <i>Sq. yds.</i> | <i>Sq. yds.</i>              | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Sq. yds.</i>            | <i>Sq. yds.</i>              | <i>Sq. yds.</i>           |          |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | \$476.23 |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 3,202.13 |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 1,228.63 |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 538.95   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 499.68   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 122.42   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 1,022.62 |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 1,088.95 |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 285.05   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 1,774.44 |
|                              |                            |                 |                              |                 |                 | 52.50                      |                              |                           | 228.64   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 465.53   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 347.27   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 3,568.15 |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 192.89   |
| 574                          |                            |                 |                              |                 |                 |                            |                              | 1,303                     | 1,864.75 |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 929.84   |
|                              | 27.50                      |                 |                              |                 |                 |                            |                              |                           | 297.93   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 56.85    |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 454.18   |
| 583                          |                            |                 |                              |                 |                 |                            |                              |                           | 930.58   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 246.93   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 708.97   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 530.97   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 790.60   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 840.96   |

TABLE K.—Assessment

| No.  | Location.                                                                                                                     | Grading.        | Cement<br>side-<br>walk. | Curb<br>reset.  | Curb set.          |                   |                 |
|------|-------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|-----------------|--------------------|-------------------|-----------------|
|      |                                                                                                                               |                 |                          |                 | 6 by 20<br>inches. | 8 by 8<br>inches. | Old.            |
|      |                                                                                                                               | <i>Cu. yds.</i> | <i>Sq. yds.</i>          | <i>Lin. ft.</i> | <i>Lin. ft.</i>    | <i>Lin. ft.</i>   | <i>Lin. ft.</i> |
| 3119 | Both sides E street SE., from Sixth to Seventh street                                                                         |                 | 1,382.66                 |                 |                    |                   |                 |
| 3120 | Both sides G street, from Sixth to Seventh, Ninth to Tenth, Fourteenth to Fifteenth                                           |                 |                          |                 |                    | 2,484.40          |                 |
| 3121 | Alley, square 924, between Eighth and Ninth, C and D streets                                                                  | 1,845           |                          | 36              |                    | 9.32              |                 |
| 3122 | North side O street west to Twenty-first street, and east side Twenty-first from O north.                                     |                 | 285.15                   | 259.40          | 9.43               |                   | 45.62           |
| 3123 | South side East Capitol street, from Third to Fourth street                                                                   |                 | 515.83                   | 340             |                    |                   | 40              |
| 3125 | North side Garfield avenue, from South Capitol to E street                                                                    | 400             |                          |                 | 249.22             |                   |                 |
| 3126 | West side Twenty-first street NW., Virginia avenue to E street                                                                |                 | 297.71                   |                 |                    |                   |                 |
| 3127 | South side Binney street NW., from Fourteenth street west to 30-foot alley                                                    | 31              |                          |                 |                    | 660               |                 |
| 3128 | Alleys in square 965, between Tenth and Eleventh, B and Massachusetts avenue                                                  | 1,350           |                          | 30              |                    |                   |                 |
| 3129 | Alleys in square 248, between K and L, Thirteenth and Fourteenth streets                                                      | 834             |                          |                 |                    |                   |                 |
| 3130 | Alleys in square 988, between Eleventh and Twelfth, East Capitol and B NE                                                     | 493             |                          | 76              | 9.42               |                   |                 |
| 3131 | Alleys in square 280, running from Twelfth street                                                                             | 102             |                          |                 |                    |                   |                 |
| 3132 | South side Grant street, from Sixteenth to Seventeenth street                                                                 | 25              | 121.47                   | 153.10          |                    |                   | 3.65            |
| 3133 | South side R street NW., from Thirty-second to Thirty-third street                                                            |                 | 247.78<br>500.24         | 29<br>7.10      |                    | 332.07            |                 |
| 3134 | West side Fifth street NW., D to E                                                                                            |                 |                          | 30              |                    | 285.30            |                 |
| 3137 | West side Fifth street NW., F to G                                                                                            |                 |                          |                 |                    | 263.28            |                 |
| 3138 | West side Second street SE., from B to Carroll                                                                                |                 |                          |                 |                    |                   |                 |
| 3140 | South side Dartmouth street NW., from Thirteenth east                                                                         |                 |                          |                 |                    |                   |                 |
| 3141 | West side Thirteenth street NW., from Hanover to Whitney avenue                                                               |                 | 959.03                   |                 |                    |                   | 27.40           |
| 3142 | South side Kenyon street NW., from Thirteenth street east, and south side Marshall, from west line Todd & Brown's subdivision |                 | 417.39                   |                 |                    | 99.61             |                 |
| 3143 | Alley, north half square 672                                                                                                  | 856             |                          |                 | 35.42              |                   |                 |
| 3145 | Alley, square north of 980                                                                                                    | 43              |                          | 35.00           |                    |                   |                 |
| 3147 | Alley, north half square 744, between Francis place, N, First, and Second                                                     | 321             |                          |                 |                    |                   |                 |
| 3148 | Alleys, south half square 69                                                                                                  | 48              |                          | 18              |                    |                   |                 |
| 3149 | Alleys, square 44                                                                                                             | 817             |                          |                 |                    |                   |                 |
| 3150 | Alleys, square 923                                                                                                            | 1,168           |                          | 95              | 9.42               |                   |                 |
| 3151 | Alleys, square 24                                                                                                             | 2,065           |                          |                 |                    |                   |                 |
| 3152 | Both sides Third street SW., from B to Virginia avenue                                                                        |                 |                          |                 |                    | 2,432.02          |                 |
| 3153 | Both sides Ninth street SE., from East Capitol to A                                                                           |                 | 849.22                   |                 |                    |                   |                 |
| 3154 | North side Providence street, from Fourteenth to Fifteenth, Brookland                                                         |                 |                          |                 |                    |                   |                 |
| 3155 | Alley, square 368, between M and N, Ninth and Tenth streets                                                                   | 230             |                          | 15              |                    |                   |                 |
| 3157 | North side Pennsylvania avenue and B street SE., from Second to Third                                                         | 217.47          |                          |                 |                    | 312.47            |                 |
| 3158 | South side Massachusetts avenue NW., Sixth to Seventh, and west side Sixth street NW., Massachusetts avenue south             |                 | 863.77                   | 580             | 63.10              |                   |                 |





TABLE K.—Assessment

| No.  | Location.                                                                                                                                            | Grading.        | Cement<br>side-<br>walk. | Curb<br>reset.  | Curb set.          |                   |                 |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|-----------------|--------------------|-------------------|-----------------|
|      |                                                                                                                                                      |                 |                          |                 | 6 by 20<br>inches. | 8 by 8<br>inches. | Old.            |
|      |                                                                                                                                                      | <i>Cu. yds.</i> | <i>Sq. yds.</i>          | <i>Lin. ft.</i> | <i>Lin. ft.</i>    | <i>Lin. ft.</i>   | <i>Lin. ft.</i> |
| 3161 | West side Harewood avenue,<br>from Elm to Oak street.....                                                                                            |                 | 150.82                   | 16.00           | 174.96             |                   |                 |
| 3163 | East side New Jersey avenue<br>NW., D to E street.....                                                                                               |                 | 613.95                   | 379.00          | 52.74              |                   |                 |
| 3164 | East side of First street SE., from N<br>south to alley.....                                                                                         | 109             |                          | 8.00            | 203.00             |                   |                 |
| 3165 | South side S street NW., from<br>First to Second.....                                                                                                | 348             |                          | 19.00           | 522.59             |                   |                 |
| 3166 | North side G street NW., from<br>Ninth to Tenth.....                                                                                                 |                 | 479.46                   |                 |                    |                   |                 |
| 3167 | South side G street NW., from<br>Fifth to Sixth.....                                                                                                 |                 | 288.64                   | 5.00            |                    |                   |                 |
| 3168 | East side Twenty-fourth street<br>NW., L to M streets.....                                                                                           |                 | 512.82                   |                 |                    |                   |                 |
| 3169 | North side E street NE., Second<br>to Third.....                                                                                                     |                 | 447.57                   |                 |                    |                   |                 |
| 3170 | North side R street NW., Florida<br>avenue to Twenty-second street.                                                                                  |                 | 216.79                   | 184.40          |                    |                   |                 |
| 3171 | Both sides Oak street, Third to<br>Fourth street.....                                                                                                |                 | 437.15                   |                 | 769.77             |                   | 20.38           |
| 3172 | North side Yale street NW., be-<br>tween Thirteenth and Sherman<br>avenue.....                                                                       |                 | 267.45                   |                 |                    |                   |                 |
| 3174 | Alley, Adams Mill road, between<br>Columbia road and Lanier ave-<br>nue.....                                                                         | 164             |                          |                 |                    |                   |                 |
| 3175 | Both sides California avenue NW.,<br>Nineteenth to Florida avenue.....                                                                               |                 |                          | 36.84           |                    | 1,768.60          |                 |
| 3176 | Both sides Vermont avenue NW.,<br>Nineteenth to Florida avenue.....                                                                                  |                 |                          | 34.00           |                    | 1,109.85          |                 |
| 3177 | South side G street NE., from<br>Fourteenth to Florence.....                                                                                         | 16              |                          | 20              | 208                |                   |                 |
| 3178 | Alleys in square 677.....                                                                                                                            | 750             |                          | 1.95            | 56.62              |                   |                 |
| 3179 | West side Second street SE., from<br>N street southward.....                                                                                         | 225             |                          | 180.10          |                    |                   |                 |
| 3180 | Both sides A street NE., from<br>Fourth to Seventh.....                                                                                              |                 |                          |                 |                    | 2,469.63          |                 |
| 3181 | Both sides Twenty-third street<br>NW., from L to M.....                                                                                              |                 |                          |                 |                    | 1,680.57          |                 |
| 3182 | Both sides P street NW., from<br>Seventeenth to Eighteenth.....                                                                                      |                 |                          |                 |                    | 1,695.36          |                 |
| 3183 | Both sides R street NW., between<br>Thirty-third and Thirty-fourth<br>Alley, square 66, between Q and<br>R, Florida avenue and Twenty-<br>first..... | 445             | 779.94                   | 30              | 9.42               |                   |                 |
| 3185 | West side Fourteenth street NW.,<br>T to W streets.....                                                                                              |                 |                          |                 |                    | 1,177.72          |                 |
| 3187 | South side Erie street, from<br>Champlain avenue to Ontario<br>avenue, and west side Ontario<br>avenue, from Erie street south-<br>ward.....         | 160             | 499.68                   |                 |                    |                   |                 |
| 3188 | Both sides Fourth street NE.,<br>from D to E street.....                                                                                             |                 | 992.37                   |                 |                    |                   |                 |
| 3190 | West side School street, from<br>Park to Grant street.....                                                                                           |                 | 356.87                   |                 | 447.69             |                   |                 |
| 3192 | Alleys in block 3, Cliffbourne.....                                                                                                                  | 1,876           |                          |                 |                    |                   |                 |
| 3194 | Alleys in square 103.....                                                                                                                            | 450             |                          | 15              |                    |                   |                 |
| 3195 | Alleys in square 1002.....                                                                                                                           | 647             |                          | 36              |                    |                   |                 |
| 3196 | West side Fourteenth street SE.,<br>from C to South Carolina ave-<br>nue.....                                                                        | 245             |                          | 15              | 468.58             |                   |                 |
| 3197 | South side Lincoln street NW.,<br>Sixth to Brightwood avenue.....                                                                                    | 208             |                          |                 |                    |                   |                 |
| 3198 | Alley (part of) in square 1283.....                                                                                                                  | 8               |                          |                 |                    |                   |                 |
| 3201 | South side I street SW., from Half<br>to First street.....                                                                                           | 207             |                          |                 |                    |                   |                 |
| 3203 | North side M street NW., between<br>Thirty-fifth and Thirty-sixth<br>streets.....                                                                    |                 | 246.85                   | 10.70           |                    |                   | 6.50            |
| 3204 | West side Twelfth street NW.,<br>from New York avenue to I<br>street.....                                                                            |                 | 158.59                   | 123.60          |                    |                   | 27              |

*work*—Continued.

[illegible]

TABLE K.—Assessment

| No.   | Location.                                                                                                        | Grading.        | Cement<br>side-<br>walk. | Curb<br>reset.  | Curb set.          |                   |                 |
|-------|------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|-----------------|--------------------|-------------------|-----------------|
|       |                                                                                                                  |                 |                          |                 | 6 by 20<br>inches. | 8 by 8<br>inches. | Old.            |
|       |                                                                                                                  | <i>Cu. yds.</i> | <i>Sq. yds.</i>          | <i>Lin. ft.</i> | <i>Lin. ft.</i>    | <i>Lin. ft.</i>   | <i>Lin. ft.</i> |
| 3206  | North side H street SW., from<br>Half to First street                                                            | 128             |                          |                 |                    |                   |                 |
| 3211  | North side D street NW., Eighth<br>to 10-foot alley east                                                         |                 | 207.89                   | 4.90            |                    | 150.26            |                 |
| 3212  | West side Ninth street NE., from<br>K to Florida avenue                                                          |                 | 600.26                   |                 |                    |                   |                 |
| 3213  | East side Thirteenth street NE.,<br>from D to E street                                                           |                 | 527.72                   |                 | 442.60             |                   |                 |
| 3214  | Nos. 314, 316, 318 Eighth street NW                                                                              |                 | 68.09                    | 3.60            |                    | 55.13             |                 |
| 3215  | West side First street NW., from<br>N to O streets                                                               |                 | 490.34                   |                 |                    |                   |                 |
| 3216  | Nos. 432, 434 Eighth street NW                                                                                   |                 | 127.46                   | 3.80            |                    | 91.53             |                 |
| 3217  | North side P street NW., from<br>Fifteenth to Sixteenth                                                          |                 | 465.38                   |                 |                    | 530.27            |                 |
| 3218  | Nos. 400, 402, 404 Eighth street NW                                                                              |                 | 129.27                   | 4.60            |                    | 86.10             |                 |
| 3219  | Alley, square 574                                                                                                | 120             |                          | 30              |                    |                   |                 |
| 3220  | Nos. 1618 to 1626, inclusive, Four-<br>teenth street NW                                                          |                 | 179.54                   |                 |                    | 107.11            |                 |
| 3222  | Fifteenth street NW., lot 141,<br>square 195, and north side Rhode<br>Island avenue, Fifteenth to Six-<br>teenth |                 | 743.68                   | 21.70           |                    | 505.20            |                 |
| 3224  | North side Pennsylvania avenue<br>NW., from Jackson place west-<br>ward                                          |                 | 355.81                   | 2.70            |                    | 259.35            |                 |
| 3225  | North side R street NW., from<br>Thirty-second to Thirty-third                                                   |                 | 229.62                   | 8               |                    |                   | 9.42            |
| 3227  | Alley, square 245 (east portion)                                                                                 | 60              |                          | 18              |                    |                   |                 |
| 3228  | Both sides A street NE., from<br>Fourth to Seventh streets                                                       |                 | 2,230.83                 |                 |                    |                   |                 |
| 3229  | East side Third street NE., from<br>H street north                                                               |                 | 208.14                   | 9.00            |                    | 173.60            | 16.40           |
| 3230  | Alley, block 7, Commissioners sub-<br>division, Washington Heights                                               | 35              |                          |                 |                    |                   |                 |
| 3242  | Alleys, square 1282                                                                                              | 1,087           |                          | 68              | 28.26              |                   |                 |
| 3253  | Alleys, east half block 41, Colum-<br>bian College lands                                                         | 158             |                          |                 |                    |                   |                 |
| 3262  | Alleys, south half of square 620                                                                                 | 208             |                          |                 |                    |                   |                 |
| 3271  | Ninth street SE., from Virginia<br>avenue to Georgia avenue                                                      |                 | 21                       |                 |                    | 335.05            |                 |
| 3274  | South side Georgia avenue SE.,<br>Ninth to Eleventh street                                                       | 165             |                          |                 |                    | 613.17            |                 |
| 3276  | North side Virginia avenue SE.,<br>Ninth to Tenth street                                                         | 56              |                          |                 |                    | 323.50            |                 |
| 3278  | Alley (north half), square 150                                                                                   | 416             |                          | 65              | 18.84              |                   |                 |
| 3283  | Alley, square 231, adjacent to lots<br>10 and 11                                                                 | 103             |                          |                 |                    |                   |                 |
| 3285  | Alleys, square 151, lying north of<br>Willard street                                                             | 230             |                          |                 |                    |                   |                 |
| 3290  | North side W street NW., be-<br>tween First and Second streets                                                   | 150             |                          | 138             | 221.42             |                   |                 |
| 3291  | West side Flagler place, between<br>U and north line lot 1, block 32                                             | 20              |                          |                 |                    |                   |                 |
| 3299  | East side Tennessee avenue NE.,<br>between East Capitol and B<br>streets                                         |                 | 398.60                   |                 |                    |                   |                 |
| 3300  | Both sides Ninth street SE., be-<br>tween East Capitol and A streets                                             |                 |                          | 96              |                    | 703.05            | 9.42            |
| 3301  | South side Seaton street NW., be-<br>tween First and Second streets                                              |                 | 220.41                   |                 | 323.91             |                   |                 |
| 3303  | Alleys in square 225, between<br>Fourteenth, Fifteenth, Penn-<br>sylvania avenue and F streets                   |                 |                          |                 |                    |                   |                 |
| 3305  | East side First street NW., be-<br>tween P and Bates                                                             |                 | 147.09                   | 48              |                    | 113.37            |                 |
| 3307  | South side C street NW., from<br>Arthur Place to New Jersey<br>avenue                                            |                 | 230.93                   |                 |                    |                   |                 |
| Total |                                                                                                                  | 24,451.64       | 58,336.09                | 7,610.75        | 18,288.69          | 20,755.73         | 923.79          |

work—Continued.

| Vitrified<br>block<br>paved. | Asphalt<br>block<br>paved. | Cobble.         | Asphalt<br>tile re-<br>laid. | Flag<br>laid.   | Flag<br>relaid. | Brick<br>sidewalk<br>laid. | Brick<br>sidewalk<br>relaid. | Granite<br>block<br>laid. | Cost.      |
|------------------------------|----------------------------|-----------------|------------------------------|-----------------|-----------------|----------------------------|------------------------------|---------------------------|------------|
| <i>Sq. yds.</i>              | <i>Sq. yds.</i>            | <i>Sq. yds.</i> | <i>Sq. yds.</i>              | <i>Lin. ft.</i> | <i>Lin. ft.</i> | <i>Sq. yds.</i>            | <i>Sq. yds.</i>              | <i>Sq. yds.</i>           |            |
|                              |                            |                 |                              |                 |                 | 405                        |                              |                           | \$259.44   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 407.73     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 680.68     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 1,287.74   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 136.77     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 547.14     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 249.02     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 1,107.99   |
|                              | 403                        |                 |                              |                 |                 | 12                         |                              |                           | 240.61     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 719.85     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 320.73     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 1,345.91   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 687.72     |
|                              | 29                         |                 |                              | 12              |                 |                            | 3                            |                           | 257.49     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 577.14     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 2,532.67   |
| 111                          |                            |                 |                              |                 |                 |                            |                              |                           | 423.44     |
|                              |                            |                 |                              |                 |                 |                            | 22                           |                           | 198.45     |
| 808                          |                            |                 |                              |                 |                 |                            |                              |                           | 1,683.32   |
|                              | 367                        |                 |                              |                 |                 |                            |                              |                           | 640.69     |
| 369                          | 2                          |                 |                              |                 |                 |                            |                              |                           | 653.35     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 376.25     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 845.72     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 335.75     |
| 655                          |                            |                 |                              |                 |                 | 8                          |                              |                           | 1,236.83   |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 30.68      |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 83.70      |
|                              |                            |                 |                              |                 |                 | 312                        |                              |                           | 530.58     |
|                              |                            |                 |                              |                 |                 | 192                        |                              |                           | 87.38      |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 441.55     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 801.06     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 639.00     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 451.69     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 292.70     |
|                              |                            |                 |                              |                 |                 |                            |                              |                           | 255.81     |
| 12,195.07                    | 13,677.50                  | 41.00           |                              | 177             |                 | 3,019.70                   | 164.00                       | 13.93                     | 179,421.61 |

TABLE L.—*Replacing and repairing sidewalks and curbs*

| No.  | Location.                                                                            | Grading.        | Cement sidewalk. | Curb re-set.    |
|------|--------------------------------------------------------------------------------------|-----------------|------------------|-----------------|
|      |                                                                                      | <i>Cu. yds.</i> | <i>Sq. yds.</i>  | <i>Lin. ft.</i> |
| 8001 | North Carolina avenue, in front of reservation 229.....                              |                 | 150.76           |                 |
| 8007 | Thirteenth street, Vermont avenue, O street, and Iowa Circle.....                    |                 | 444.67           | 311.00          |
| 8011 | Seaton Park, from Missouri avenue to Maine avenue.....                               |                 | 375.01           | 210.00          |
| 8014 | Reservation 100, Twenty-fourth street, F, Virginia avenue NW.....                    |                 | 346.46           |                 |
| 8015 | Reservations 98 and 134, New Hampshire avenue, Virginia avenue, and G street.....    |                 | 759.68           |                 |
| 8016 | Reservation 102, Virginia avenue, Twenty-second and E streets NW.....                |                 | 285.61           | 18.50           |
| 8017 | Reservation 99, G and Twenty-fourth streets NW.....                                  |                 | 295.00           | 216.50          |
| 8019 | South side Pennsylvania avenue SE., between Seventh and Eighth streets.....          |                 | 280.31           | 200.00          |
| 8020 | D street NE., between Ninth and Thirteenth streets.....                              |                 |                  |                 |
| 8026 | Hubbard School, Kenyon street NW., between Sherman avenue and Thirteenth street..... |                 | 201.41           |                 |
| 8029 | East side Tennessee avenue, between East Capitol and B streets NE.....               | 20.00           | 206.52           |                 |
| 8040 | Truck house, S street NW., between Thirty-fourth and Thirty-fifth streets.....       | 121.00          |                  | 69.00           |
| 8074 | East side Fourteenth street NW., between I and K.....                                |                 | 566.66           | 5.33            |
| 8169 | New Jersey avenue, between D and E streets NW. (police station).....                 |                 | 89.15            | 40.00           |
|      | Total.....                                                                           | 141.00          | 4,001.24         | 1,070.33        |

around public reservations and municipal buildings.

| Curb set.       |                |          | Brick sidewalk repaved. | Granite block. | Cobble.  | Flag re-laid. | Asphalt tile. | Cost.    |
|-----------------|----------------|----------|-------------------------|----------------|----------|---------------|---------------|----------|
| 6 by 20 inches. | 8 by 8 inches. | Old.     |                         |                |          |               |               |          |
| Lin. ft.        | Lin. ft.       | Lin. ft. | Sq. yds.                | Sq. yds.       | Sq. yds. | Lin. ft.      | Sq. yds.      |          |
|                 |                |          |                         |                |          |               |               | \$146.73 |
| 24.50           |                | 70.00    |                         |                |          |               |               | 536.47   |
| 36.20           |                | 31.00    |                         |                |          |               |               | 527.25   |
|                 |                |          |                         |                |          |               |               | 334.38   |
|                 | 1,078.97       |          |                         |                |          |               |               | 1,921.14 |
| 257.00          |                |          |                         |                |          |               |               | 512.42   |
| 12.10           |                | 20.00    |                         |                |          |               |               | 349.59   |
|                 | 20.55          | 20.00    |                         |                |          |               |               | 405.40   |
|                 |                |          | 822.00                  | 24.00          | 28.00    | 80.00         |               | 197.91   |
|                 | 124.87         |          |                         |                |          |               |               | 324.02   |
|                 |                |          |                         |                |          |               |               | 207.04   |
| 72.25           |                |          |                         |                |          |               |               | 461.62   |
|                 | 385.10         |          |                         |                |          |               |               | 1,011.88 |
|                 |                |          |                         |                |          |               |               | 104.71   |
| 372.65          | 1,609.49       | 141.00   | 822.00                  | 24.00          | 28.00    | 80.00         |               | 7,040.56 |

TABLE M.—Miscellaneous

| No.  | Location.                                                                  | Appropriation.                                                          | Grading. |          | Curb<br>reset. |
|------|----------------------------------------------------------------------------|-------------------------------------------------------------------------|----------|----------|----------------|
|      |                                                                            |                                                                         | Cu. yds. | Lin. ft. |                |
| 8002 | Rock Creek Park.....                                                       | Grading streets, alleys, and roads.                                     |          |          |                |
| 8003 | Quarry road bridge.....                                                    | Bridge across Rock Creek line<br>Quarry road.                           |          |          |                |
| 8004 | Rock Creek Park.....                                                       | Care and improvement of Rock<br>Creek Park under board of con-<br>trol. |          |          |                |
| 8005 | Newport place .....                                                        | Grading streets, alleys, and roads.                                     |          |          |                |
| 8012 | Florida avenue, at Tenth street<br>NW.                                     | Improvements and repairs,<br>northwest section.                         |          |          |                |
| 8024 | Bennings road.....                                                         | Grading streets, alleys, and roads.                                     | 6,195    |          |                |
| 8025 | G street, between Sixth and Fif-<br>teenth streets.                        | G street, between Sixth and Fif-<br>teenth streets NW.                  |          |          |                |
| 8027 | O street, between North Capitol<br>and First streets NE.                   | Improvements and repairs,<br>northeast section.                         |          |          |                |
| 8028 | Massachusetts avenue bridge .....                                          | Massachusetts avenue bridge<br>across Rock Creek.                       |          |          |                |
| 8031 | Eighth street NE., between L and<br>Florida avenue.                        | Improvements and repairs, north-<br>east section.                       |          |          |                |
| 8032 | K street SE., between South Cap-<br>itol and Second streets.               | Improvements and repairs, south-<br>east section.                       |          |          |                |
| 8033 | Second street SE., between I and<br>L streets.                             | do .....                                                                |          |          |                |
| 8034 | H street SW., between First and<br>Canal streets.                          | Improvements and repairs, south-<br>west section.                       |          |          |                |
| 8035 | Half street, between H and N<br>streets SE.                                | Improvements and repairs, south-<br>east section.                       |          |          |                |
| 8036 | I street SW., between First and<br>Canal streets.                          | Improvements and repairs, south-<br>west section.                       |          |          |                |
| 8037 | L street, between South Capitol<br>and Second streets SE.                  | Improvements and repairs, south-<br>east section.                       |          |          |                |
| 8038 | Half street, between G and N<br>streets SW.                                | Improvements and repairs, south-<br>west section.                       |          |          |                |
| 8039 | Ninth street NE., between I street<br>and Florida avenue.                  | Improvements and repairs, north-<br>east section.                       |          |          |                |
| 8042 | Bennings road, east of the bridge..                                        | Grading streets, alleys, and roads.                                     | 6,257    |          |                |
| 8043 | Connecticut avenue crossing, Ca-<br>thedral avenue.                        | Cathedral avenue .....                                                  |          |          |                |
| 8044 | Blagden avenue .....                                                       | Grading and regulating Blagden<br>avenue.                               |          |          |                |
| 8045 | L street SE., east from Fifteenth<br>street.                               | do .....                                                                |          |          |                |
| 8047 | Bennings road, east of bridge .....                                        | Bennings road .....                                                     |          |          |                |
| 8048 | Michigan avenue.....                                                       | Michigan avenue .....                                                   |          |          |                |
| 8049 | Thirty-seventh street, between Y<br>and Back streets.                      | Thirty-seventh street .....                                             |          |          |                |
| 8051 | D street NW., between Eighteenth<br>and Twentieth streets.                 | Improvements and repairs, north-<br>west section.                       |          |          |                |
| 8052 | Eighteenth street NW., between D<br>street and Virginia avenue.            | do .....                                                                |          |          |                |
| 8053 | Nineteenth street NW., between E<br>street and Virginia avenue.            | do .....                                                                |          |          |                |
| 8054 | New York avenue NW., between<br>Nineteenth and Twenty-third<br>streets.    | do .....                                                                |          |          |                |
| 8055 | Twentieth street NW., between E<br>street and Virginia avenue.             | do .....                                                                |          |          |                |
| 8056 | Twenty-first street NW., between<br>E street and Virginia avenue.          | do .....                                                                |          |          |                |
| 8057 | Twenty-second street NW., be-<br>tween Virginia and New York<br>avenues.   | do .....                                                                |          |          |                |
| 8058 | Michigan avenue, west of Lincoln<br>avenue.                                | Michigan avenue .....                                                   |          |          |                |
| 8059 | Frankfort street, between Twen-<br>tieth street and Queens Chapel<br>road. | Frankfort, Twenty-second, and<br>Twenty-fourth streets, Lang-<br>don.   |          |          |                |
| 8060 | Acker street, between Sixth and<br>Seventh streets NE.                     | Improvements and repairs, north-<br>east section.                       |          |          |                |



work.

| Curb set.          |          | Cobble.  | Brick side-<br>walk<br>paved. | Brick<br>sidewalk<br>repaved. | Cobble<br>gutters. | Drain-<br>pipe. | Cost.     |
|--------------------|----------|----------|-------------------------------|-------------------------------|--------------------|-----------------|-----------|
| 6 by 20<br>inches. | Old.     |          |                               |                               |                    |                 |           |
| Lin. ft.           | Lin. ft. | Sq. yds. | Sq. yds.                      | Sq. yds.                      | Sq. yds.           | Lin. ft.        |           |
|                    |          |          |                               |                               |                    |                 | \$601.50  |
|                    |          |          |                               |                               |                    |                 | 151.00    |
|                    |          |          |                               |                               |                    |                 | 12,490.54 |
|                    |          |          |                               |                               |                    |                 | 126.87    |
|                    |          |          |                               |                               |                    |                 | 77.44     |
|                    |          |          |                               |                               |                    |                 | 1,495.62  |
|                    |          |          |                               |                               |                    |                 | 345.66    |
|                    |          |          |                               |                               |                    |                 | 44.15     |
|                    |          |          |                               |                               |                    |                 | 12.50     |
|                    |          |          |                               |                               |                    |                 | 91.00     |
|                    |          |          |                               |                               |                    |                 | 535.10    |
|                    |          |          |                               |                               |                    |                 | 73.70     |
|                    |          |          |                               |                               |                    |                 | 113.15    |
|                    |          |          |                               |                               |                    |                 | 485.69    |
|                    |          |          |                               |                               |                    |                 | 119.95    |
|                    |          |          |                               |                               |                    |                 | 528.39    |
|                    |          |          |                               |                               |                    |                 | 620.21    |
|                    |          |          |                               |                               |                    |                 | 255.12    |
|                    |          |          |                               |                               |                    |                 | 1,729.92  |
|                    |          |          |                               |                               |                    |                 | 440.32    |
|                    |          |          |                               |                               |                    |                 | 243.19    |
|                    |          |          |                               |                               |                    |                 | 329.00    |
|                    |          |          |                               |                               |                    |                 | 902.19    |
|                    |          |          |                               |                               |                    |                 | 62.31     |
|                    |          |          |                               |                               |                    |                 | 190.63    |
|                    |          |          |                               |                               |                    |                 | 176.02    |
|                    |          |          |                               |                               |                    |                 | 222.80    |
|                    |          | 81       |                               |                               |                    |                 | 606.99    |
|                    |          |          |                               |                               |                    |                 | 224.40    |
|                    |          |          |                               |                               |                    |                 | 159.50    |
|                    |          |          |                               |                               |                    |                 | 303.92    |
|                    |          |          |                               |                               |                    |                 | 38.73     |
|                    |          |          |                               |                               |                    |                 | 156.87    |
|                    |          |          |                               |                               |                    |                 | 82.00     |

TABLE M.—Miscellaneous

| No.  | Location.                                                                                                    | Appropriation.                                                              | Grading.        | Curb<br>reset.  |
|------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------|-----------------|
|      |                                                                                                              |                                                                             | <i>Cu. yds.</i> | <i>Lin. ft.</i> |
| 8061 | Thirty-seventh, intersection of W street.                                                                    | Thirty-seventh and other streets, Burleigh.                                 | 2,300           | .....           |
| 8062 | V street NW., between North Capitol and First streets.                                                       | Grading streets, alleys, and roads.                                         | 2,080           | .....           |
| 8064 | Third street, between L and M streets NE.                                                                    | Improvements and repairs, north-east section.                               | 1,259           | .....           |
| 8065 | Intersection Crescent and Sixteenth street extended.                                                         | Grading and improving Crescent street.                                      | .....           | .....           |
| 8066 | Bennings road, east of bridge .....                                                                          | Bennings and Anacostia roads .....                                          | .....           | .....           |
| 8067 | Frankfort street, between Twenty-second and Twenty-fourth streets.                                           | Frankfort street, between Twenty-second and Twenty-fourth streets, Langdon. | .....           | .....           |
| 8068 | Acker street, between Sixth and Seventh streets NE.                                                          | Improvements and repairs, north-east section.                               | 59              | .....           |
| 8071 | Twenty-third street NW., between Virginia avenue and E street.                                               | Improvements and repairs, north-west section.                               | .....           | .....           |
| 8072 | Columbus avenue .....                                                                                        | Grading streets, alleys, and roads.                                         | .....           | .....           |
| 8073 | U street, between Thirty-sixth and Thirty-seventh streets, and Thirty-sixth street, between U and V streets. | Thirty-seventh and other streets, Burleigh.                                 | .....           | .....           |
| 8075 | Florida avenue, from New York avenue to Brentwood road.                                                      | Retain of J. Frawly .....                                                   | 150             | 130             |
| 8076 | D street, between Ninth and Thirtieth streets NE.                                                            | Improvements and repairs, northeast section.                                | .....           | .....           |
| 8078 | South Capitol street, K to M streets SW.                                                                     | Improvements and repairs, southwest section.                                | .....           | .....           |
| 8080 | Quincy street, between Eighth street and Brightwood avenue.                                                  | Quincy street .....                                                         | .....           | .....           |
| 8081 | Fourth street, between D and F streets NE.                                                                   | Improvements and repairs, northeast section.                                | .....           | .....           |
| 8082 | Kenesaw avenue .....                                                                                         | Kenesaw avenue and Park road.                                               | .....           | .....           |
| 8084 | Philadelphia street .....                                                                                    | Emergency .....                                                             | 1,125           | .....           |
| 8086 | Twelfth street NE., between Emporia and Austin streets.                                                      | Grading streets, alleys, and roads.                                         | 2,310           | .....           |
| 8087 | Kenesaw avenue .....                                                                                         | Kenesaw avenue and Park road.                                               | .....           | .....           |
| 8090 | Thirteenth street NE., between C and Emerson streets.                                                        | Grading streets, alleys, and roads.                                         | 1,118           | .....           |
| 8091 | Crescent street .....                                                                                        | Crescent street .....                                                       | .....           | .....           |
| 8092 | C street, between Fourteenth and Fifteenth streets SE.                                                       | Grading streets, alleys, and roads.                                         | .....           | .....           |
| 8093 | Second street, between I and K streets SE.                                                                   | Improvements and repairs, southeast section.                                | 2,350           | .....           |
| 8095 | K street, between Ninth and Tenth streets NE.                                                                | Grading streets, alleys, and roads.                                         | 1,800           | .....           |
| 8096 | .....do .....                                                                                                | Rebuilding Lovejoy School building.                                         | .....           | .....           |
| 8098 | Cathedral avenue, between Cincinnati street and Woodley lane.                                                | Cathedral avenue .....                                                      | .....           | .....           |
| 8100 | Cathedral avenue .....                                                                                       | do .....                                                                    | .....           | .....           |
| 8102 | Twenty-second street NW., between D street and New York avenue.                                              | Improvements and repairs, northwest section.                                | .....           | .....           |
| 8103 | E street, between Twentieth and Twenty-first streets NW.                                                     | do .....                                                                    | .....           | .....           |
| 8105 | Bennings road, east of Eastern Branch.                                                                       | Bennings road .....                                                         | .....           | .....           |
| 8107 | Genesee street, between Brightwood avenue and Fourteenth Street road.                                        | Grading streets, alleys, and roads.                                         | .....           | .....           |
| 8108 | Cathedral avenue, intersection of Woodley road.                                                              | Cathedral avenue .....                                                      | 50              | 205             |
| 8110 | Connecticut avenue, north of Cleveland Park .....                                                            | Connecticut avenue extended .....                                           | .....           | .....           |
| 8112 | Rock Creek Park .....                                                                                        | Grading streets, alleys, and roads.                                         | .....           | .....           |
| 8113 | Bennings road, east of bridge .....                                                                          | Bennings and Anacostia roads .....                                          | .....           | .....           |



TABLE M.—Miscellaneous

| No.        | Location.                                                                                                                        | Appropriation.                                         | Grading.               | Curb<br>reset.           |
|------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|------------------------|--------------------------|
| 8116       | North side Pennsylvania avenue SE., between Eleventh and Thirteenth streets.                                                     | Improvements and repairs, southeast section.           | <i>Cu. yds.</i><br>180 | <i>Lin. ft.</i><br>..... |
| 8117       | Fortieth and Xenia streets (chemical engine house).                                                                              | Chemical engine house, Tennallytown.                   | 18                     | 82                       |
| 8120       | Ninth street SE., between Pennsylvania avenue and Estreet, and Pennsylvania avenue SE., between Eleventh and Thirteenth streets. | Improvements and repairs southeast section.            | .....                  | .....                    |
| 8121       | Thirteenth street NE., from C to D streets.                                                                                      | Grading streets, alleys, and roads.                    | .....                  | .....                    |
| 8122       | Whitney avenue, near Fourteenth street NW.                                                                                       | Truck house, Columbia Heights.                         | .....                  | .....                    |
| 8123       | Quarry road bridge.....                                                                                                          | Quarry road bridge.....                                | .....                  | .....                    |
| 8124       | Fifteenth and K streets SE.....                                                                                                  | Grading streets, alleys, and roads.....                | .....                  | .....                    |
| 8131       | Bennings and Anacostia roads.....                                                                                                | Bennings and Anacostia roads.....                      | .....                  | .....                    |
| 8132       | Thirty-seventh street, between Y and Back streets.                                                                               | Streets in Burleigh.....                               | .....                  | .....                    |
| 8134       | Fifteenth and Rosedale streets (Webb School).                                                                                    | One 8-room school building and site.                   | .....                  | .....                    |
| 8139       | Quarry road bridge.....                                                                                                          | Quarry road bridge.....                                | .....                  | .....                    |
| 8141       | V street NW. and other streets.....                                                                                              | Streets in Burleigh.....                               | .....                  | .....                    |
| 8159       | Rock Creek Park.....                                                                                                             | Roadway from Brightwood avenue across Rock Creek Park. | .....                  | .....                    |
| 8160       | Eleventh street, between Wallace and Whitney avenues.                                                                            | Eleventh street extended.....                          | .....                  | .....                    |
| 8161       | Blagden avenue.....                                                                                                              | Blagden avenue.....                                    | .....                  | .....                    |
| 8162       | Michigan avenue.....                                                                                                             | Michigan avenue.....                                   | 61                     | .....                    |
| 8163       | Tennallytown road (chemical engine house).                                                                                       | Chemical engine house, Tennallytown.                   | .....                  | .....                    |
| 8165       | East side Rock Creek, between Cincinnati street and Woodley road.                                                                | Cincinnati street retaining wall.....                  | .....                  | .....                    |
| 8166       | Adams Mill road, from Cincinnati street to Zoo entrance.                                                                         | Adams Mill road.....                                   | .....                  | .....                    |
| 8167       | Fifth street NE., between D and E streets.                                                                                       | Improvements and repairs, northeast section.           | .....                  | .....                    |
| 8168       | Bladensburg road.....                                                                                                            | Bladensburg road.....                                  | .....                  | .....                    |
| Total..... |                                                                                                                                  | .....                                                  | 27,312                 | 417                      |

work—Continued.

| Curb set.          |                 | Cobble.         | Brick side-<br>walk<br>paved. | Brick<br>sidewalk<br>repaved. | Cobble<br>gutters. | Drain-<br>pipe. | Cost.     |
|--------------------|-----------------|-----------------|-------------------------------|-------------------------------|--------------------|-----------------|-----------|
| 6 by 20<br>inches. | Old.            |                 |                               |                               |                    |                 |           |
| <i>Lin. ft.</i>    | <i>Lin. ft.</i> | <i>Sq. yds.</i> | <i>Sq. yds.</i>               | <i>Sq. yds.</i>               | <i>Sq. yds.</i>    | <i>Lin. ft.</i> |           |
| 98.69              | 975             |                 |                               |                               |                    |                 | \$359.23  |
|                    |                 | 54              |                               |                               |                    |                 | 307.65    |
|                    |                 |                 |                               | 802                           |                    |                 | 191.85    |
|                    |                 |                 |                               |                               |                    |                 | 34.75     |
|                    |                 |                 |                               |                               |                    |                 | 68.04     |
|                    |                 |                 |                               |                               |                    |                 | 162.25    |
|                    |                 |                 |                               |                               |                    |                 | 307.50    |
|                    |                 |                 |                               |                               |                    |                 | 881.28    |
|                    |                 |                 |                               |                               | 350                |                 | 122.50    |
|                    |                 |                 |                               |                               |                    |                 | 1,639.46  |
|                    |                 |                 |                               |                               |                    |                 | 181.98    |
|                    |                 |                 |                               |                               |                    |                 | 199.50    |
|                    |                 |                 |                               |                               |                    |                 | 618.99    |
|                    |                 |                 |                               |                               |                    |                 | 186.50    |
|                    |                 |                 |                               |                               |                    | 306             | 405.48    |
|                    |                 | 67              |                               |                               |                    |                 | 124.03    |
|                    |                 |                 |                               |                               |                    |                 | 100.27    |
|                    |                 |                 |                               |                               |                    |                 | 201.18    |
|                    |                 |                 |                               |                               |                    |                 | 243.07    |
|                    |                 |                 |                               |                               |                    |                 | 11.50     |
|                    |                 |                 |                               |                               |                    | 300             | 113.25    |
| 98.69              | 975             | 724             | 957                           | 1,000                         | 515                | 606             | 39,763.64 |

TABLE N.—Whole cost of work.

| N. o. | Location.                                                        | For whom done.                     | Cement sidewalk laid. | Curb re-set. | Brick sidewalk laid. | Vitrified block laid. | Cost.   |
|-------|------------------------------------------------------------------|------------------------------------|-----------------------|--------------|----------------------|-----------------------|---------|
|       |                                                                  | Davidson & Davidson.....           | Sq. yards.            | Lin. feet.   | Sq. yards.           | Sq. yards.            | \$10.00 |
| 5001  | S street NW., between Phelps place and Twenty-fourth street..... | C. F. Greishaber.....              | 130.75                | 28.25        | -----                | -----                 | 140.80  |
| 5002  | No. 2121 Massachusetts avenue NW.....                            | Anacostia and Potomac Rwy. Co..... | -----                 | -----        | -----                | -----                 | 21.16   |
| 5003  | Anacostia Bridge.....                                            | Anderson & Howison.....            | -----                 | -----        | -----                | 16.66                 | 41.01   |
| 5004  | South Capitol between N and O streets.....                       | Geo. W. Lyles.....                 | -----                 | -----        | -----                | -----                 | 11.15   |
| 5005  | No. 136 Fourteenth street NW.....                                | Dewey Hotel Co.....                | -----                 | -----        | -----                | -----                 | 92.53   |
| 5006  | Nos. 1008-1012 Thirteenth street NW.....                         | Jas. Holmes & Son.....             | -----                 | 16.5         | 6.75                 | -----                 | 92.53   |
| 5007  | First and E. streets NW.....                                     | H. L. Rust.....                    | -----                 | -----        | -----                | -----                 | 2.70    |
| 5008  | No. 1246 Third street NW.....                                    | Bernard Green.....                 | -----                 | 197.9        | -----                | -----                 | 73.80   |
| 5009  | Fourteenth and Pennsylvania avenue NW.....                       | L. Leaman.....                     | -----                 | -----        | -----                | -----                 | 6.00    |
| 5010  | No. 1325 Fourteenth street NW.....                               | Jos. Richardson.....               | -----                 | 24.8         | -----                | 14.4                  | 46.38   |
| 5011  | No. 3157 Q street NW.....                                        | J. T. Moxley.....                  | -----                 | -----        | -----                | -----                 | 5.00    |
| 5012  | No. 1000 Maryland avenue NE.....                                 | T. E. Waggaman.....                | -----                 | 9            | 15                   | 9                     | 7.00    |
| 5013  | No. 1117 Eighteenth street NW.....                               | Mrs. J. H. Merrilatt.....          | -----                 | -----        | -----                | -----                 | 19.87   |
| 5014  | University place, opposite.....                                  | -----                              | -----                 | -----        | -----                | -----                 | -----   |
| 5015  | Total.....                                                       | -----                              | 130.75                | 271.45       | 21.75                | 40.06                 | 475.05  |

TABLE O.—Number of square yards and cost charged for repairs to cuts made by plumbers and others in streets, avenues, and alleys during the year ended June 30, 1901.

Item No. 1 shows the number of cuts repaired for various plumbers.  
 Item No. 2 shows the number of cuts repaired and the cost thereof, or "whole-cost" work, to which 5 per cent is added for tools, clerk hire, etc., for the maintenance of the "Deposit and assessment fund," which fund is used to pay all accounts for labor, material, tools, etc., used in this class of work, and also includes the work done for gas, electric-light, and telephone companies, which is charged at the flat rates charged to plumbers.  
 Item No. 3 shows the number of cuts repaired on account of the sewer department and the cost of the same.  
 Item No. 4 shows the number of cuts repaired on account of the water department and the cost of the same.  
 Item No. 5 shows the number of cuts repaired and work done on account of other appropriations of the District and the cost of the same; also the cost of work charged against retents and appropriations of the General Government.

|                                                                                                                                                                                                                                         | Number. | Square yards. | Cost (amount charged). |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------|------------------------|
| ITEM No. 1.—Plumbers' cuts:                                                                                                                                                                                                             |         |               |                        |
| Sheet asphalt .....                                                                                                                                                                                                                     | 198     | 507.2         | \$1,597.68             |
| Granite block .....                                                                                                                                                                                                                     | 137     | 506.16        | 683.32                 |
| Asphalt block .....                                                                                                                                                                                                                     | 264     | 660.5         | 891.67                 |
| Vitrified block or brick .....                                                                                                                                                                                                          | 112     | 504           | 680.40                 |
| Cobblestone and rubble .....                                                                                                                                                                                                            | 236     | 511           | 229.95                 |
| Macadam .....                                                                                                                                                                                                                           | 92      | 151.91        | 81.05                  |
| Granolithic .....                                                                                                                                                                                                                       | 87      | 174           | 391.50                 |
|                                                                                                                                                                                                                                         | 1,126   | 3,014.77      | 4,555.57               |
| ITEM No. 2.—Anacostia and Potomac River R. R., City and Suburban R. R., Metropolitan R. R., Capital Traction Co., Brightwood R. R., United States and Potomac Electric Light Co., Washington Gas Light Co., and other corporations..... | 984     | 30,122.5      | 20,412.22              |
| ITEM No. 3.—Various appropriations of the sewer department.....                                                                                                                                                                         | 451     | 16,265.4      | 14,592.83              |
| ITEM No. 4.—Pumping expenses and pipe distribution, water department .....                                                                                                                                                              | 369     | 15,104.6      | 11,728.90              |
| ITEM No. 5.—Various appropriations of the District other than the above, including repairs to streets and roads, street lighting, telegraph and telephone service, improvements and repairs, assessment and permit work, etc.....       | 141     | 4,651.1       | 8,972.34               |
| Total .....                                                                                                                                                                                                                             |         |               | 60,261.86              |

The following statement is a comparison between the plumbers' cuts made during the year ended June 30, 1901, and for the eleven preceding years. These figures include all small repair work (charged at flat rates) done for corporations prior to the fiscal year 1900. Work of this character is now included under item No. 2.

| Year.         | Number. | Square yards. | Cost.      | Year.           | Number. | Square yards. | Cost.       |
|---------------|---------|---------------|------------|-----------------|---------|---------------|-------------|
| 1889-90 ..... | 393     | 2,085.06      | \$3,712.06 | 1895-96 .....   | 1,305   | 11,941.03     | \$14,156.18 |
| 1890-91 ..... | 852     | 3,899.61      | 6,488.02   | 1896-97 .....   | 1,016   | 15,048.07     | 25,530.55   |
| 1891-92 ..... | 980     | 5,220.5       | 6,994.58   | 1897-98 .....   | 1,659   | 7,022.37      | 11,718.27   |
| 1892-93 ..... | 2,132   | 8,694.67      | 14,025.68  | 1898-99 .....   | 1,524   | 6,728.05      | 10,316.83   |
| 1893-94 ..... | 1,583   | 9,233.25      | 15,272.72  | 1899-1900 ..... | 1,436   | 3,916         | 4,686.58    |
| 1894-95 ..... | 1,236   | 6,712.57      | 9,267.71   | 1900-1901 ..... | 1,126   | 3,014.77      | 4,555.57    |

# 82 OPERATIONS OF THE ENGINEER DEPARTMENT, D. C.

LIST OF EMPLOYEES OF SURFACE DIVISION, OTHER THAN DAY LABORERS, ENGAGED ON REGULAR AND CONTINUOUS WORK, WHOSE SERVICES WILL BE REQUIRED DURING THE FISCAL YEAR 1903.

|                                   | Rate of wages.            | Estimated amount of salary for the year. |
|-----------------------------------|---------------------------|------------------------------------------|
| 1 assistant engineer .....        | <i>Per day.</i><br>\$4.85 | \$1,518                                  |
| Do .....                          | 4.00                      | 1,252                                    |
| 1 engineer of bridges .....       | 1125.00                   | 1,500                                    |
| 1 transitman .....                | 3.50                      | 1,066                                    |
| 3 rodmen .....                    | 3.00                      | 2,817                                    |
| 3 chainmen .....                  | 2.25                      | 2,112                                    |
| 1 draftsman .....                 | 3.50                      | 1,065                                    |
| 2 clerks .....                    | 4.50                      | 2,816                                    |
| 1 clerk .....                     | 4.00                      | 1,252                                    |
| Do .....                          | 3.00                      | 939                                      |
| 1 inspector .....                 | 5.00                      | 1,565                                    |
| Do .....                          | 4.00                      | 1,252                                    |
| 1 computer .....                  | 4.00                      | 1,252                                    |
| 1 messenger .....                 | 1.75                      | 548                                      |
| 1 superintendent of stables ..... | 5.00                      | 1,609                                    |

<sup>1</sup> Per month.

<sup>2</sup> Four months: paid for balance of year from sewer and water appropriations.

*List of employees, surface division, temporarily required, and appropriation from which paid, for fiscal year ended June 30, 1901.*

| Designation.             | Number. | Assessment and permit work. | Improvements and repairs. | Repairs to county roads. | Side-walks and curbs around public reservations. | Constructing county roads. | School-houses. | Engine and truck houses. |
|--------------------------|---------|-----------------------------|---------------------------|--------------------------|--------------------------------------------------|----------------------------|----------------|--------------------------|
| Assistant engineers..... | 4       | \$1,329.19                  | \$1,594.39                | \$257.81                 | \$120.82                                         | \$587.10                   |                |                          |
| Inspectors.....          | 28      | 3,876.00                    | 3,638.00                  | 270.00                   | 75.00                                            | 1,334.00                   | \$84.00        | \$90.00                  |
| Foremen .....            | 18      | 3,102.97                    | 813.13                    | 4,737.87                 |                                                  | 868.79                     | 137.50         | 40.65                    |
| Other employees .....    | 580     | 26,062.20                   | 9,009.15                  | 34,548.61                | 199.18                                           | 9,623.98                   | 920.89         | 279.81                   |
| Total .....              |         | 34,370.36                   | 15,054.67                 | 39,814.29                | 395.00                                           | 12,413.87                  | 1,142.48       | 380.46                   |

| Designation.             | Bridges.  | Repairs to streets, etc. | Deposit and assessment fund. | Rock Creek Park. | Grading streets, alleys, and roads. | Various deposits. | Emergency repairs to roads and bridges. | Grand total. |
|--------------------------|-----------|--------------------------|------------------------------|------------------|-------------------------------------|-------------------|-----------------------------------------|--------------|
| Assistant engineers..... | \$522.10  | \$1,582.89               |                              |                  |                                     |                   |                                         | \$5,994.39   |
| Inspectors.....          | 3,963.00  | 3,496.50                 |                              |                  |                                     | \$822.00          |                                         | 17,588.50    |
| Foremen .....            | 976.04    | 3,845.10                 | \$1,377.36                   | \$1,691.68       |                                     | 10.10             | \$399.05                                | 17,910.33    |
| Other employees.....     | 8,924.77  | 26,417.59                | 12,410.73                    | 11,859.73        | \$6,388.71                          | 67.61             | 2,160.62                                | 148,873.58   |
| Total .....              | 14,385.91 | 35,312.08                | 13,788.09                    | 13,551.41        | 6,388.71                            | 869.71            | 2,469.67                                | 190,366.71   |

## REPORT OF THE SUPERINTENDENT OF COUNTY ROADS.

WASHINGTON, July 1, 1901.

SIR: I have the honor to submit report of the operations of the county road division during the fiscal year ended June 30, 1901.

MORRIS HACKER.  
*Superintendent of Roads.*

The COMPUTING ENGINEER,  
*District of Columbia.*

Respectfully transmitted to the Engineer Commissioner District of Columbia through Capt. H. C. Newcomer.

C. B. HUNT.  
*Computing Engineer, District of Columbia.*



*Expenditures for repairing county roads and suburban streets, fiscal year 1900-1901.*

| Location.                                                                                             | Amount.  | Location.                                                                     | Amount.   |
|-------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------|-----------|
| CENTRAL SECTION.                                                                                      |          | CENTRAL SECTION—continued.                                                    |           |
| Woodley road, within line of Twentieth street.....                                                    | \$81.87  | North Capitol street, at Seaton and T streets.....                            | \$21.75   |
| Genesee street, between Fourteenth and Brightwood avenue.....                                         | 312.25   | Brightwood avenue, between Richmond and Utica streets.....                    | 78.69     |
| Heine tract, Brightwood avenue.....                                                                   | 145.52   | Brightwood avenue.....                                                        | 95.50     |
| Park drive.....                                                                                       | 196.98   | Grant street, between Seventeenth and Eighteenth streets.....                 | 64.12     |
| Pomeroy street, between Fourth and Moores lane.....                                                   | 33.87    | S street, between Twenty-fourth street and Phelps place.....                  | 26.00     |
| Brightwood avenue, between Rock Creek Church road and District line.....                              | 890.13   | Twentieth street, through to Wyoming avenue.....                              | 36.00     |
| Queens Chapel road.....                                                                               | 25.37    | North Capitol street, between T street and Michigan avenue.....               | 338.61    |
| Providence street, between Thirtieth and Fifteenth streets.....                                       | 1,275.68 | Detroit street, from Twenty-fourth street east, Langdon.....                  | 370.85    |
| Marshall street, between Seventh street and Sherman avenue.....                                       | 180.25   | Brightwood avenue, from Brightwood to District line.....                      | 529.13    |
| Trinidad street, King's subdivision, Trinidad.....                                                    | 1,177.69 | Flint street, from Brightwood avenue east.....                                | 1,997.77  |
| Lincoln avenue, from Glenwood Cemetery to Michigan avenue.....                                        | 603.06   | Sixteenth street, north of Howard avenue.....                                 | 18.25     |
| S street, between First and Le Droit avenue NW.....                                                   | 85.28    | Grant street, between Seventeenth and Eighteenth streets.....                 | 504.37    |
| S street, between First and North Capitol streets.....                                                | 98.25    | Baltimore street, between Nineteenth and Twentieth streets.....               | 415.18    |
| T street, between Second street and Lincoln avenue.....                                               | 26.19    | Brightwood avenue, between Quincy and Richmond streets.....                   | 17.75     |
| Lowell and Klinge roads, intersection.....                                                            | 30.66    | Binney street, from Fourteenth street westward.....                           | 805.80    |
| Eighteenth street, between Grant and Lowell streets.....                                              | 30.50    | Dangerous holes and minor repairs.....                                        | 6,690.85  |
| Twentieth street, between Woodley road and Cincinnati street.....                                     | 189.25   |                                                                               | 22,159.19 |
| Frankfort street, between Twelfth and Fourteenth streets.....                                         | 15.75    | EASTERN SECTION.                                                              |           |
| Fourteenth street, between Whitney and Lydecker avenues.....                                          | 175.00   | Minnesota avenue, south of Naylor road.....                                   | 26.25     |
| Sixth street, between Lincoln and Sumner, and Sumner, between Sixth street and Brightwood avenue..... | 600.50   | Pennsylvania avenue and Branch avenue.....                                    | 80.88     |
| Eighteenth street, Howard avenue, Mount Pleasant.....                                                 | 915.54   | Bennings road.....                                                            | 257.94    |
| Thomas street, between First and Second streets.....                                                  | 323.25   | Geisboro and Livingston roads.....                                            | 254.81    |
| Fort street, between Twelfth and Thirteenth streets.....                                              | 11.00    | Howard avenue, from Baltimore and Ohio to Eastern Branch.....                 | 25.12     |
| Brightwood avenue, between Savannah and Quincy streets.....                                           | 50.62    | Hamilton road.....                                                            | 201.50    |
| Providence street, between Fourteenth and Fifteenth streets.....                                      | 738.67   | Walker road, from Hamilton road to District line.....                         | 302.62    |
| Twelfth street, between Fort street and Rhode Island avenue.....                                      | 115.74   | Good Hope Hill road.....                                                      | 150.12    |
| Concord street, between Tenth and Thirteenth streets.....                                             | 1,421.44 | Bennings road, from Anacostia road to District line.....                      | 209.50    |
| Dover street, between Tenth and Twelfth streets.....                                                  | 5.75     | Bennings Bridge, west causeway.....                                           | 573.75    |
| Twelfth street, between Emporia and Austin streets.....                                               | 60.00    | Bennings road, east of bridge.....                                            | 149.49    |
| Erie street, Meridian subdivision.....                                                                | 3.25     | Dangerous holes and minor repairs.....                                        | 3,578.89  |
| Kenyon street, across Thirteenth street.....                                                          | 23.00    |                                                                               | 5,810.87  |
| Columbus avenue.....                                                                                  | 4.18     | WESTERN SECTION.                                                              |           |
| Lincoln street, between Sixth and Seventh streets.....                                                | 278.37   | Flint street and Reno road.....                                               | 719.22    |
| Rhode Island and Harewood avenues.....                                                                | 4.26     | Klinge road, from Linnean Hill road to Rock Creek.....                        | 2,325.71  |
| Seaton street, between Second and Third streets NE.....                                               | 19.45    | Dangerous holes and minor repairs Newark, from Wisconsin avenue eastward..... | 4,085.77  |
|                                                                                                       |          | Joliet street, between Connecticut avenue and Zoo Park.....                   | 394.07    |
|                                                                                                       |          |                                                                               | 11,561.79 |

## RECAPITULATION.

|                                                                 |             |
|-----------------------------------------------------------------|-------------|
| Central section .....                                           | \$22,159.19 |
| Eastern section .....                                           | 5,810.87    |
| Western section .....                                           | 11,561.79   |
| Hire of horse and buggy .....                                   | 313.00      |
| Salaries, surface division .....                                | 1,921.00    |
| Salaries, property division .....                               | 689.93      |
| Blacksmithing .....                                             | 399.74      |
| Fuel, purchase of tools, and miscellaneous labor .....          | 2,619.87    |
| Purchase of trap macadam, and freight on same .....             | 13,375.79   |
| Purchase of flint stone, cobble, gravel, pipe, and cement ..... | 2,658.14    |
| Amount of appropriation .....                                   | \$60,000.00 |
| Amount of repayments .....                                      | 941.93      |
|                                                                 | 60,941.93   |
| Balance of appropriation .....                                  | 22.61       |

## REPORT OF THE ENGINEER OF BRIDGES.

WASHINGTON, D. C., July 1, 1901.

SIR: I have the honor to submit the following report for the fiscal year ended June 30, 1901:

The expenditures under "Ordinary care of bridges" were as follows:

|                                    |            |
|------------------------------------|------------|
| Amount of appropriation .....      | \$4,000.00 |
| Salaries .....                     | \$3,844.39 |
| Coal, oil, and contingencies ..... | 32.82      |
| Paint purchased .....              | 118.76     |
| Balance .....                      | 4.03       |
|                                    | 4,000.00   |

Keepers were stationed at the Aqueduct Bridge, over the Potomac, and the Pennsylvania Avenue and Navy-Yard bridges, over the Eastern Branch. At the last-named structure the operation of the draw requires a keeper and helper, and at the other two the demands of the public convenience justify their retention. These men are special police officers, and, in addition to caring for the cleanliness and safety of the structures, they enforce public order, and have frequently made arrests and secured conviction in cases of violation of law.

The work of "Construction and repairs" is shown by the annexed table. The regular repairs consisted of painting the ironwork, removal of floors, and such minor repairs as were from time to time required. The structures are in good condition, requiring only such repairs as are due to their regular and continued use. An exception from this statement should be made in the case of the Navy-Yard (or Anacostia) Bridge (No. 55), which has been considered structurally weak, and, since the employment of the heavy motor cars of the Anacostia Railway Company, particularly so. The electric cars which now cross the bridge weigh, when empty, between 7 and 10 tons, and when loaded with people this load reaches a maximum of 17 tons. The bridge was not designed to carry such a heavy load. In addition, the draw is archaic, the bridge unsightly, much too narrow (the entire width of the roadway being taken up with car tracks), and totally inadequate to meet the demands of public travel, in consequence of which I have the honor to recommend that it be replaced with a modern structure of ample width. This recommendation has been made each year since 1887, and the conditions described in each of these several reports are to-day aggravated. The present bridge was constructed in 1875. Its condition is notoriously bad and worthy of serious consideration.

The principal item of expenditure under the appropriation for "Construction and repairs of bridges" is for the construction of a concrete arch bridge over Broad Branch, on the line of the Argyle road. The contract price for this bridge is \$3,767.50, \$3,228.20 of which will be paid from this appropriation, consuming the entire balance. The old bridge, of timber and iron, was built in 1888. It was structurally very weak, and entirely out of harmony with its surroundings. The new bridge, which will consist of concrete throughout, was designed by this office, assisted by Mr. Glenn Brown, architect. It has a span of 24 feet and a rise of 9 feet. This bridge is now under construction.

The other work—of considerable magnitude—under this appropriation consisted of laying new floors on bridges No. 30 (Cincinnati street) and No. 31 (Woodley

lane) and the purchase of lumber for bridge No. 55 (Anacostia), amounting together to \$6,396.57.

Three thousand one hundred and sixty-five dollars and twenty-six cents was expended from the emergency appropriation for the repair of certain roads and bridges damaged by the storm of June 2, 1900, in the reconstruction of a bridge over Piney Branch, on the line of Rock Creek drive. The bridge destroyed by the storm was of culvert construction, having a span of 10 feet. The plans for the new bridge were prepared by the Melan Arch Construction Company, of New York, under the direction of this office. It consists of a five-centered arch having a span of 24 feet and a rise of 9 feet. It is constructed of concrete, incasing nine 5 inch steel I beams. The entire bridge is faced with second-class masonry of a good description. The waterway is double that of the old bridge, and all foundations are carried to rock.

Twenty-two thousand dollars was appropriated for the construction of a bridge across Rock Creek, on the line of the Quarry road, in the Zoological Park, to be built under the direction of the Engineer Commissioner.

The old bridge was constructed of timber and iron, and was in a very unsafe condition. The plans for the new bridge were prepared by the Melan Arch Construction Company, under the direction of this office. It consists of a single seven-centered arch of 80 feet span and 14 feet rise, and has an effective discharge area of 1,200 square feet. It is constructed of concrete throughout, with a cement mortar face. The arch incases 10 steel-latticed girders. The foundations for the arch are carried to rock, and those of the wing walls extend about 6 feet below the natural surface of the ground. The bridge has been completed excepting the construction of the sidewalks and the grading of the creek. The present balance is \$775.59.

Concrete steel was used in these two bridges in preference to steel or stone, as it is thought that it combines the beauty and permanency of the stone arch with a cost not more than 50 per cent greater than that of a steel bridge, the cost of maintenance of which is a factor of great moment. This construction is particularly advantageous where a flat arch is essential, as in the case of these bridges.

Forty thousand dollars was appropriated toward the construction of a bridge across Rock Creek on the line of Connecticut avenue extended. The work is now under construction. This appropriation will result in the completion of the foundations of all piers from 2 to 9, inclusive. Pier 3 and part of pier 2 were previously constructed under the appropriation for 1899. All foundations have been carried to rock, and have been built up to within about 5 feet of the natural surface of the ground. The bridge, which was designed by Mr. Morison, will be of concrete with granite ashlar facing. The soffits of the arches and the spandrel walls, between the faces of the bridge, will be faced with light-colored brick.

Fifty thousand dollars was appropriated for continuing the construction of a bridge across Rock Creek on the line of Massachusetts avenue extended, provided the Commissioners purchase or condemn the necessary land, the title of which was not possessed by the District. The strip of land lying immediately adjacent to the creek was the only piece not possessed by the District. This was acquired by condemnation proceedings, at a cost of \$2,040.05. The \$50,000 appropriated made a total of \$225,000, which will complete the bridge. The work is now under construction. The masonry arch will be completed in October, after which must be made a fill of 250,000 cubic yards.

I have the honor to submit with this report a record of tests of bricks made in connection with the construction of the Massachusetts avenue bridge; also some tests made upon concrete sand, showing its weight per cubic foot with different percentages of water.

*Tabulation of brick tested for the engineer department*

[NOTE.—The percentage of water absorbed by each brick was determined by the District for twenty-four hours at a temperature of 230° F., then immersed in water for twenty-four hours. The percentages here tabulated are by weight. The compressive strength of each brick was determined by testing on its broadest bed in the following manner: The first three bricks in each set each half being tested and their mean tabulated. The first brick of the series (unlettered) between cardboard cushions one-fourth inch thick. The third brick (B) was tested between pine-boards one-fourth inch thick, the fourth brick (C) had its compressed surfaces faced with plaster of paris, the sixth brick (E) was tested between pine-board cushions one-half inch thick.]

## COMPARISON OF TESTS

|                                  | Mean strength. | Relative strength. |
|----------------------------------|----------------|--------------------|
| WHOLE BRICKS.                    |                |                    |
| Set in plaster of paris.....     | 6,880          | 1.00               |
| Between cardboard cushions.....  | 5,710          | .83                |
| Between pine-board cushions..... | 4,400          | .64                |

NOTE.—Average absorption of red brick, 9.93 per cent.

|    | Designation.         | Description of brick. |                    |                           | Size in inches.      |
|----|----------------------|-----------------------|--------------------|---------------------------|----------------------|
|    |                      | Condition of clay.    | Method of molding. |                           |                      |
| 1  | Paving brick .....   | Stiff mud ...         | Machine ...        | Re-pressed, wire end cut. | 2.50 by 4.22 by 8.43 |
| 2  | do .....             | do .....              | do .....           | do .....                  | 2.50 by 4.27 by 8.44 |
| 3  | do .....             | do .....              | do .....           | do .....                  | 2.50 by 4.26 by 8.40 |
| 4  | do .....             | do .....              | do .....           | do .....                  | 2.51 by 4.25 by 8.35 |
| 5  | do .....             | do .....              | do .....           | do .....                  | 2.49 by 4.26 by 8.04 |
| 6  | do .....             | do .....              | do .....           | do .....                  | 2.41 by 4.10 by 8.11 |
| 7  | do .....             | do .....              | do .....           | Re-pressed .....          | 2.48 by 4.12 by 8.57 |
| 8  | do .....             | do .....              | do .....           | do .....                  | 2.42 by 4.11 by 8.54 |
| 9  | do .....             | do .....              | do .....           | do .....                  | 2.50 by 4.26 by 8.44 |
| 10 | do .....             | do .....              | do .....           | do .....                  | 2.40 by 4.15 by 8.58 |
| 11 | do .....             | do .....              | do .....           | do .....                  | 2.43 by 4.10 by 8.53 |
| 12 | do .....             | do .....              | do .....           | do .....                  | 2.42 by 4.14 by 8.55 |
| 13 | do .....             | do .....              | do .....           | Wire (side) cut .....     | 2.33 by 3.99 by 8.47 |
| 14 | do .....             | do .....              | do .....           | do .....                  | 2.38 by 4.03 by 8.48 |
| 15 | do .....             | do .....              | do .....           | do .....                  | 2.38 by 4.02 by 8.46 |
| 16 | do .....             | do .....              | do .....           | do .....                  | 2.39 by 4.14 by 8.53 |
| 17 | do .....             | do .....              | do .....           | do .....                  | 2.37 by 4.05 by 8.44 |
| 18 | do .....             | do .....              | do .....           | do .....                  | 2.41 by 4.19 by 8.65 |
| 19 | Building brick ..... | Semidry .....         | do .....           | do .....                  | 2.27 by 4.04 by 8.19 |
| 20 | do .....             | do .....              | do .....           | do .....                  | 2.32 by 4.04 by 8.36 |
| 21 | do .....             | do .....              | do .....           | do .....                  | 2.27 by 4.05 by 8.23 |
| 22 | do .....             | Stiff mud .....       | do .....           | Wire (side) cut .....     | 2.30 by 4.02 by 8.19 |
| 23 | do .....             | do .....              | do .....           | do .....                  | 2.34 by 3.92 by 8.34 |
| 24 | do .....             | do .....              | do .....           | do .....                  | 2.31 by 3.97 by 8.18 |
| 25 | do .....             | do .....              | do .....           | do .....                  | 2.43 by 4.11 by 8.65 |
| 26 | do .....             | do .....              | do .....           | do .....                  | 2.38 by 4.05 by 8.40 |
| 27 | do .....             | do .....              | do .....           | do .....                  | 2.38 by 3.99 by 8.41 |
| 28 | do .....             | Semidry .....         | do .....           | Re-pressed .....          | 2.32 by 4.09 by 8.36 |
| 29 | do .....             | do .....              | do .....           | do .....                  | 2.32 by 3.99 by 8.22 |
| 30 | do .....             | do .....              | do .....           | do .....                  | 2.35 by 4.02 by 8.34 |
| 31 | do .....             | do .....              | do .....           | do .....                  | 2.55 by 4.02 by 8.51 |
| 32 | do .....             | do .....              | do .....           | do .....                  | 2.56 by 3.97 by 8.68 |
| 33 | do .....             | do .....              | do .....           | do .....                  | 2.63 by 4.12 by 8.61 |
| 34 | do .....             | Soft mud .....        | Hand .....         | do .....                  | 2.41 by 4.18 by 8.48 |
| 35 | do .....             | do .....              | do .....           | do .....                  | 2.42 by 4.16 by 8.47 |
| 36 | do .....             | do .....              | do .....           | do .....                  | 2.43 by 4.15 by 8.49 |
| 37 | do .....             | do .....              | do .....           | do .....                  | 2.28 by 4.00 by 8.33 |
| 38 | do .....             | do .....              | do .....           | do .....                  | 2.21 by 3.96 by 8.19 |
| 39 | do .....             | do .....              | do .....           | do .....                  | 2.32 by 4.06 by 8.31 |
| 40 | do .....             | do .....              | do .....           | do .....                  | 2.34 by 4.12 by 8.32 |
| 41 | do .....             | do .....              | do .....           | do .....                  | 2.36 by 3.97 by 8.24 |
| 42 | do .....             | do .....              | do .....           | do .....                  | 2.29 by 4.09 by 8.31 |
| 43 | do .....             | Semidry .....         | Machine .....      | Re-pressed .....          | 2.46 by 4.12 by 8.57 |
| 44 | do .....             | do .....              | do .....           | do .....                  | 2.48 by 4.19 by 8.59 |

of the District of Columbia, February 25, 1901.

inspector of asphalt and cements in the following manner: The brick was weighed after drying hours. After immersion the surface water was removed and the brick immediately weighed, tested by the Ordnance Department, United States Army, at Watertown Arsenal, Mass. Each series were tested as whole bricks. The last three bricks in each series were tested as half bricks, had its compressed surfaces faced with plaster of paris. The second brick (A) was tested board cushions one-half inch thick. Where more than three bricks of the same kind and manufaris, the fifth brick (D) was tested between cardboard cushions one-fourth inch thick, and the

## OF RED BRICK.

|                                  | Mean strength. | Relative strength. |
|----------------------------------|----------------|--------------------|
| HALF BRICKS.                     |                |                    |
| Set in plaster of paris.....     | 5,640          | 0.82               |
| Between cardboard cushions.....  | 4,430          | .64                |
| Between pine-board cushions..... | 4,540          | .66                |

| Description of brick.                   |                   | Per cent of water absorbed. | Compressive strength in pounds per square inch. |           | Remarks.                                                                                                |    |
|-----------------------------------------|-------------------|-----------------------------|-------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------|----|
| Color.                                  | Weight in pounds. |                             | Crack-ing.                                      | Breaking. |                                                                                                         |    |
| Medium red .....                        | 5.91              | 13.8                        | 2,420                                           | 5,250     |                                                                                                         | 1  |
| .....do.....                            | 5.95              | 13.7                        | 1,110                                           | 4,690A    | True surface, free from flaws and cracks, even and compact texture.                                     | 2  |
| .....do.....                            | 5.94              | 14.1                        | 870                                             | 2,850B    |                                                                                                         | 3  |
| .....do.....                            | 6.02              | 13.1                        | 2,490                                           | 4,811C    |                                                                                                         | 4  |
| .....do.....                            | 5.95              | 14                          | 2,550                                           | 3,780D    |                                                                                                         | 5  |
| .....do.....                            | 5.96              | 10.1                        | 1,370                                           | 3,515E    |                                                                                                         | 6  |
| .....do.....                            | 5.95              | 11.1                        | 3,030                                           | 7,280     | Bottom very rough, free from flaws, very few cracks, even and compact texture.                          | 7  |
| .....do.....                            | 5.96              | 9.6                         | 2,210                                           | 5,730A    |                                                                                                         | 8  |
| .....do.....                            | 5.93              | 14.1                        | 1,020                                           | 4,510B    |                                                                                                         | 9  |
| .....do.....                            | 5.94              | 10.5                        | 2,560                                           | 6,025C    |                                                                                                         | 10 |
| .....do.....                            | 5.92              | 11                          | 1,500                                           | 4,225D    |                                                                                                         | 11 |
| .....do.....                            | 5.96              | 10.9                        | 1,870                                           | 3,525E    |                                                                                                         | 12 |
| Darker than average.                    | 5.85              | 7.1                         | 7,960                                           | 9,150     |                                                                                                         | 13 |
| Medium red .....                        | 5.88              | 8.6                         | 4,950                                           | 6,180A    | Bottom and top surfaces very slightly concave, free from flaws and cracks, even and compact texture.    | 14 |
| .....do.....                            | 5.79              | 9.1                         | 3,180                                           | 6,680B    |                                                                                                         | 15 |
| .....do.....                            | 5.89              | 11.7                        | 4,000                                           | 7,545C    |                                                                                                         | 16 |
| .....do.....                            | 5.91              | 8.9                         | 2,860                                           | 6,225D    |                                                                                                         | 17 |
| .....do.....                            | 6.04              | 11.3                        | 1,650                                           | 5,470E    |                                                                                                         | 18 |
| Buff, with light and dark brown specks. | 5.42              | 5.3                         | 13,360                                          | 18,400    | Face bricks, free from flaws and cracks, even and compact texture.                                      | 19 |
| .....do.....                            | 5.55              | 5.9                         | 10,670                                          | 11,820A   |                                                                                                         | 20 |
| .....do.....                            | 5.29              | 6.2                         | 6,030                                           | 11,040B   |                                                                                                         | 21 |
| Drab (no speckles).                     | 6                 | .5                          | 2,820                                           | 13,550    |                                                                                                         | 22 |
| .....do.....                            | 6.02              | .3                          | 980                                             | 15,750A   |                                                                                                         | 23 |
| .....do.....                            | 5.96              | .18                         | 6,100                                           | 10,220B   |                                                                                                         | 24 |
| Medium red .....                        | 5.80              | 13.3                        | 3,030                                           | 6,590     | Foundation and backing brick, true surface, free from flaws and cracks, even and compact texture.       | 25 |
| .....do.....                            | 5.65              | 10.6                        | 1,820                                           | 6,180A    |                                                                                                         | 26 |
| .....do.....                            | 5.81              | 7.9                         | 2,450                                           | 5,800B    |                                                                                                         | 27 |
| .....do.....                            | 5.62              | 9.5                         | 5,590                                           | 10,570    | Used for facing and backing, true surface, very few flaws and cracks, even and compact texture.         | 28 |
| .....do.....                            | 5.51              | 7.4                         | 980                                             | 7,840A    |                                                                                                         | 29 |
| .....do.....                            | 5.67              | 6.3                         | 1,550                                           | 5,700B    |                                                                                                         | 30 |
| .....do.....                            | 6.24              | 8.1                         | 6,310                                           | 9,120     | Backing brick, slightly in wind, few cracks and flaws, fairly even and compact texture.                 | 31 |
| .....do.....                            | 6.26              | 7.9                         | 2,750                                           | 6,020A    |                                                                                                         | 32 |
| .....do.....                            | 6.58              | 8.5                         | 1,170                                           | 4,480B    |                                                                                                         | 33 |
| .....do.....                            | 5.50              | 11                          | 4,330                                           | 5,110     | Facing brick, true surface, free from flaws and cracks, even and compact texture.                       | 34 |
| .....do.....                            | 5.50              | 10.4                        | 1,010                                           | 5,050A    |                                                                                                         | 35 |
| .....do.....                            | 5.51              | 10                          | 1,290                                           | 4,710B    |                                                                                                         | 36 |
| .....do.....                            | 5.49              | 7.2                         | 4,980                                           | 8,480     |                                                                                                         | 37 |
| .....do.....                            | 5.05              | 5.8                         | 120                                             | 9,020A    |                                                                                                         | 38 |
| .....do.....                            | 5.46              | 6.4                         | 240                                             | 5,400B    | .....do.....                                                                                            | 39 |
| .....do.....                            | 5.35              | 9.4                         | 4,110                                           | 5,885C    |                                                                                                         | 40 |
| .....do.....                            | 5.39              | 6.3                         | 1,980                                           | 5,505D    |                                                                                                         | 41 |
| .....do.....                            | 5.46              | 6.4                         | 4,450                                           | 5,820E    |                                                                                                         | 42 |
| With numerous streaks and blotches.     | 5.80              | 10                          | 1,790                                           | 6,360     |                                                                                                         | 43 |
| .....do.....                            | 5.94              | 9.8                         | 2,000                                           | 4,700A    | True surface, except bottom, which is very rough; few flaws, numerous cracks, even and compact texture. | 44 |

*Tabulation of brick tested for the engineer department*

|    | Designation.           | Description of brick. |                    |                     |                      |
|----|------------------------|-----------------------|--------------------|---------------------|----------------------|
|    |                        | Condition of clay.    | Method of molding. |                     | Size in inches.      |
| 45 | Sewer brick.....       | Semidry .....         | Machine ...        | Re-pressed.....     | 2.41 by 4.14 by 8.57 |
| 46 | do.....                | do.....               | do.....            | do.....             | 2.50 by 4.20 by 8.65 |
| 47 | do.....                | do.....               | do.....            | do.....             | 2.40 by 4.09 by 8.55 |
| 48 | do.....                | Soft mud .....        | Hand .....         | do.....             | 2.48 by 4.15 by 8.59 |
| 49 | do.....                | do.....               | do.....            | do.....             | 2.55 by 4.06 by 8.55 |
| 50 | do.....                | do.....               | do.....            | do.....             | 2.51 by 4.07 by 8.67 |
| 51 | do.....                | do.....               | do.....            | do.....             | 2.36 by 4.08 by 8.50 |
| 52 | do.....                | do.....               | do.....            | do.....             | 2.35 by 4.06 by 8.46 |
| 53 | do.....                | do.....               | do.....            | do.....             | 2.60 by 4.05 by 8.49 |
| 54 | do.....                | Semidry .....         | Machine ...        | Re-pressed.....     | 2.60 by 4.22 by 8.55 |
| 55 | do.....                | do.....               | do.....            | do.....             | 2.40 by 4.06 by 8.45 |
| 56 | do.....                | do.....               | do.....            | do.....             | 2.50 by 4.16 by 9.04 |
| 57 | Vitrified sewer brick. | do.....               | do.....            | do.....             | 2.47 by 4.27 by 9.05 |
| 58 | do.....                | do.....               | do.....            | do.....             | 2.53 by 4.10 by 9.13 |
| 59 | do.....                | do.....               | do.....            | do.....             | 2.45 by 4.25 by 8.92 |
| 60 | do.....                | do.....               | do.....            | do.....             | 2.46 by 4.22 by 8.92 |
| 61 | do.....                | do.....               | do.....            | do.....             | 2.45 by 4.23 by 8.89 |
| 62 | do.....                | do.....               | do.....            | do.....             | 2.49 by 4.07 by 8.70 |
| 63 | Common brick .....     | Soft mud .....        | do.....            | do.....             | 2.48 by 4.11 by 8.66 |
| 64 | do.....                | do.....               | do.....            | do.....             | 2.51 by 4.18 by 8.81 |
| 65 | do.....                | do.....               | do.....            | do.....             | 2.52 by 4.16 by 8.74 |
| 66 | do.....                | do.....               | do.....            | do.....             | 2.48 by 4.07 by 8.70 |
| 67 | do.....                | do.....               | do.....            | do.....             | 2.52 by 4.14 by 8.58 |
| 68 | do.....                | do.....               | do.....            | do.....             | 2.57 by 4.10 by 8.50 |
| 69 | Sewer brick .....      | Semidry .....         | do.....            | Re-pressed.....     | 2.52 by 4.10 by 8.47 |
| 70 | do.....                | do.....               | do.....            | do.....             | 2.49 by 4.10 by 8.52 |
| 71 | do.....                | do.....               | do.....            | do.....             | 2.46 by 4.09 by 8.47 |
| 72 | do.....                | do.....               | do.....            | do.....             | 2.50 by 4.18 by 8.65 |
| 73 | do.....                | do.....               | do.....            | do.....             | 2.54 by 3.98 by 8.42 |
| 74 | do.....                | do.....               | do.....            | do.....             | 2.58 by 4.14 by 8.58 |
| 75 | do.....                | do.....               | do.....            | do.....             | 2.60 by 4.10 by 8.50 |
| 76 | do.....                | do.....               | do.....            | do.....             | 2.59 by 4.17 by 8.55 |
| 77 | do.....                | do.....               | do.....            | do.....             | 2.60 by 4.16 by 8.48 |
| 78 | do.....                | do.....               | do.....            | do.....             | 2.58 by 4.29 by 8.60 |
| 79 | do.....                | do.....               | do.....            | do.....             | 2.65 by 4.25 by 8.61 |
| 80 | do.....                | do.....               | do.....            | do.....             |                      |
| 81 | do.....                | Stiff mud .....       | do.....            | Wire (side) cut.... | 2.37 by 4.20 by 8.54 |
| 82 | do.....                | do.....               | do.....            | do.....             | 2.36 by 4.17 by 8.47 |
| 83 | do.....                | do.....               | do.....            | do.....             | 2.37 by 4.22 by 8.55 |

of the District of Columbia, February 25, 1901—Continued.

| Description of brick.                               |                   | Per cent of water absorbed. | Compressive strength in pounds per square inch. |           | Remarks.                                                                                                                                                           |    |
|-----------------------------------------------------|-------------------|-----------------------------|-------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Color.                                              | Weight in pounds. |                             | Cracking.                                       | Breaking. |                                                                                                                                                                    |    |
| With numerous streaks and blotches.                 | 5.85              | 10.9                        | 2,700                                           | 6,840     | True surface, free from flaws and cracks, even and compact texture.                                                                                                | 45 |
| do                                                  | 5.93              | 13.7                        | 2,560                                           | 4,680A    |                                                                                                                                                                    | 46 |
| do                                                  | 5.84              | 9.6                         | 900                                             | 3,370B    |                                                                                                                                                                    | 47 |
| Darker than average.                                | 5.85              | 7.7                         | 4,910                                           | 6,450     |                                                                                                                                                                    | 48 |
| do                                                  | 5.88              | 7.6                         | 3,490                                           | 5,700A    | do                                                                                                                                                                 | 49 |
| do                                                  | 5.90              | 8.4                         | 710                                             | 3,340B    |                                                                                                                                                                    | 50 |
| do                                                  | 5.40              | 9.1                         | Not tested.                                     |           | do                                                                                                                                                                 | 51 |
| do                                                  | 5.42              | 8.9                         | 4,090                                           | 5,970     |                                                                                                                                                                    | 52 |
| do                                                  | 5.94              | 8.4                         | 130                                             | 3,830A    | do                                                                                                                                                                 | 53 |
| Medium red                                          | 6.12              | 11.1                        | 4,190                                           | 5,110     |                                                                                                                                                                    | 54 |
| do                                                  | 6.28              | 12.9                        | 2,520                                           | 3,860A    | do                                                                                                                                                                 | 55 |
| do                                                  | 5.64              | 10.5                        | 2,010                                           | 4,120B    |                                                                                                                                                                    | 56 |
| Light brown, dark speckles.                         | 6.84              | 1.2                         | 7,500                                           | 17,360    | do                                                                                                                                                                 | 57 |
| do                                                  | 6.79              | .48                         | 1,000                                           | 11,470A   |                                                                                                                                                                    | 58 |
| do                                                  | 6.88              | .64                         | 6,370                                           | 9,270B    | do                                                                                                                                                                 | 59 |
| Buff                                                | 7.66              | 1.2                         | 3,640                                           | 18,100    |                                                                                                                                                                    | 60 |
| do                                                  | 7.55              | 2.4                         | 4,820                                           | 12,660A   | do                                                                                                                                                                 | 61 |
| do                                                  | 7.30              | 1.05                        | 2,420                                           | 7,550B    |                                                                                                                                                                    | 62 |
| Medium red                                          | 5.81              | 9.1                         | 5,220                                           | 6,100     | True surface, except bottom, which is very rough; free from flaws and cracks, even and compact texture.                                                            | 63 |
| do                                                  | 5.91              | 9.3                         | 2,000                                           | 5,450A    |                                                                                                                                                                    | 64 |
| do                                                  | 5.98              | 10.4                        | 950                                             | 3,060B    |                                                                                                                                                                    | 65 |
| do                                                  | 5.95              | 10.7                        | 3,590                                           | 4,940C    |                                                                                                                                                                    | 66 |
| do                                                  | 5.81              | 9.5                         | 2,470                                           | 3,895D    | do                                                                                                                                                                 | 67 |
| do                                                  | 5.91              | 10.2                        | 3,630                                           | 4,560E    |                                                                                                                                                                    | 68 |
| do                                                  | 6.06              | 11.8                        | 4,400                                           | 5,180     | do                                                                                                                                                                 | 69 |
| do                                                  | 5.95              | 12.9                        | 120                                             | 4,440A    |                                                                                                                                                                    | 70 |
| do                                                  | 5.90              | 10.4                        | 690                                             | 4,060B    | True surface, free from flaws and cracks, even and compact texture.                                                                                                | 71 |
| do                                                  | 5.93              | 10.7                        | 4,300                                           | 5,230C    |                                                                                                                                                                    | 72 |
| do                                                  | 6.59              | 9.8                         | 3,340                                           | 4,005D    | do                                                                                                                                                                 | 73 |
| do                                                  | 6.17              | 7.6                         | 2,740                                           | 5,775E    |                                                                                                                                                                    | 74 |
| do                                                  | 6.40              | 9.6                         | 5,360                                           | 7,320     | do                                                                                                                                                                 | 75 |
| do                                                  | 6.61              | 9                           | 3,590                                           | 7,570A    |                                                                                                                                                                    | 76 |
| do                                                  | 6.35              | 11.6                        | 2,220                                           | 4,400B    | Surface slightly in wind, few flaws and cracks, even and compact texture.                                                                                          | 77 |
| do                                                  | 6.42              | 10.4                        | 3,460                                           | 5,050C    |                                                                                                                                                                    | 78 |
| do                                                  | 6.41              | 13.4                        | 1,710                                           | 3,340D    | do                                                                                                                                                                 | 79 |
| Lighter than average.                               | 6.43              | 13.1                        | 1,690                                           | 3,080E    |                                                                                                                                                                    | 80 |
| Reddish brown on exterior and cherry red on inside. | 6.28              | 8                           | 4,130                                           | 6,130     | Surface in wind, few flaws and cracks, hard burnt, almost vitrified, even and compact texture, contained from 30 to 40 per cent shale, No. 83 had one large crack. | 81 |
|                                                     | 6.42              | 6.5                         | 80                                              | 6,170A    |                                                                                                                                                                    | 82 |
|                                                     | 6.30              | 7.1                         | 470                                             | 3,480B    |                                                                                                                                                                    | 83 |

In making the sand test, 4 cubic feet of dry sand was first weighed, then 1 per cent of water by bulk was added and thoroughly mixed with the sand by turning over 4 times with shovels and raking it at the same time. Then the wet sand was weighed, and after weighing one-half per cent more water was added, and the same operation repeated as indicated in the tabulation, until 19 per cent of water had been added. The weight of the dry sand was 93 pounds per cubic foot. This weight per cubic foot decreased as the water was added, until 5 per cent of water had been mixed with the sand, at which point it weighed 83.63 pounds. After this the weight per cubic foot increased until it reached its original dry weight of 93 pounds, which occurred when about 18 per cent of water had been added.

| No. of test. | Per cent of water by bulk. | Weight of concrete sand per cubic foot. |
|--------------|----------------------------|-----------------------------------------|
|              | <i>Per cent.</i>           | <i>Pounds.</i>                          |
| 1.....       | Dry.                       | 93                                      |
| 2.....       | 1                          | 89.05                                   |
| 3.....       | 2                          | 88.44                                   |
| 4.....       | 3                          | 87.35                                   |
| 5.....       | 4                          | 86.85                                   |
| 6.....       | 5                          | 85                                      |
| 7.....       | 6                          | 83                                      |
| 8.....       | 7                          | 81.65                                   |
| 9.....       | 8                          | 83.63                                   |
| 10.....      | 9                          | 83.81                                   |
| 11.....      | 10                         | 83.94                                   |
| 12.....      | 11                         | 87.75                                   |
| 13.....      | 12                         | 88                                      |
| 14.....      | 13                         | 88.75                                   |
| 15.....      | 14                         | 89.25                                   |
| 16.....      | 15                         | 92.06                                   |
| 17.....      | 16                         | 94.25                                   |
| 18.....      | 17                         | 96.75                                   |
| 19.....      | 18                         | 99.59                                   |

In conclusion, I have the honor to recommend that the following amounts be appropriated for the fiscal year ending June 30, 1903:

|                                                                                   |         |
|-----------------------------------------------------------------------------------|---------|
| For the ordinary care of bridges .....                                            | \$4,000 |
| For the construction and repair of bridges .....                                  | 25,000  |
| For Anacostia Bridge (for necessary borings, surveys, estimates, and plans) ..... | 3,000   |
| For K street bridge over Rock Creek (reconstruction) .....                        | 20,000  |
| For Connecticut avenue bridge over Rock Creek (for continuing construction) ..... | 200,000 |

It is thought that the \$200,000 recommended for Connecticut avenue will complete the bridge up to the actual springing line of the arches, which is considered a natural and proper limit. The appropriation for 1902, amounting to \$75,000, will complete the foundations, including those for the abutment walls, and will construct piers 2 to 4, inclusive, up to the top of the belting course.

*Expenditures, construction and repair of bridges, 1901.*

| Order No.— | Bridge. | Character of work.                 | Cost.    |
|------------|---------|------------------------------------|----------|
| 6000       | .....   | Various bridges, July 1-15 .....   | \$5.75   |
| 6001       | 52      | Painting .....                     | 51.37    |
| 6002       | .....   | Cleaning various bridges .....     | 3.50     |
| 6003       | 30      | Attaching knee braces .....        | 156.15   |
| 6004       | 20      | Painting .....                     | 94.50    |
| 6005       | 55      | Relay sidewalk .....               | 44.76    |
| 6006       | .....   | Various bridges, July 16-31 .....  | 1.25     |
| 6007       | 40      | Lay new floor and painting .....   | 497.54   |
| 6008       | 39      | do .....                           | 412.18   |
| 6009       | 31      | Lay new floor .....                | 1,581.33 |
| 6010       | 35      | do .....                           | 373.23   |
| 6014       | .....   | Various bridges, Aug. 1-15 .....   | 4.38     |
| 6015       | .....   | Various bridges, Aug. 16-31 .....  | 18.12    |
| 6016       | 35      | Painting .....                     | 141.50   |
| 6017       | 54      | Repair railing .....               | 239.17   |
| 6018       | .....   | Various bridges, Sept. 1-15 .....  | 3.62     |
| 6019       | .....   | Various bridges, Sept. 16-30 ..... | 51.44    |
| 6020       | 30      | Lay new floor .....                | 2,498.44 |
| 6021       | .....   | Various bridges, Oct. 1-15 .....   | 58.70    |



*Expenditures, construction and repair of bridges, 1901—Continued.*

| Order No. | Bridge. | Character of work.                                                   | Cost.     |
|-----------|---------|----------------------------------------------------------------------|-----------|
| 6022      |         | Repair culvert (Bladensburg road) .....                              | \$592.21  |
| 6023      |         | Repair bridge (Twenty-fourth street, Langdon) .....                  | 51.18     |
| 6025      |         | Various bridges, Nov. 1-15 .....                                     | 2.25      |
| 6026      |         | Various bridges, Nov. 16-30 .....                                    | 35.83     |
| 6027      | 3       | Relay floor .....                                                    | 52.81     |
| 6028      |         | Various bridges, Dec. 1-15 .....                                     | 10.00     |
| 6029      |         | Guard fence, Bladensburg .....                                       | 44.04     |
| 6030      |         | Various bridges, Dec. 16-31 .....                                    | 37.50     |
| 6031      | 30      | Encase trestle posts, Cincinnati street .....                        | 824.67    |
| 6032      |         | Various bridges, Jan. 1-15 .....                                     | 12.14     |
| 6034      | 31      | Repair fence .....                                                   | 69.54     |
| 6036      |         | Various bridges, Feb. 16-28 .....                                    | 13.48     |
| 6037      |         | Various bridges, Mar. 1-15 .....                                     | 7.58      |
| 6038      |         | Quarry road bridge (lay drain pipe) .....                            | 9.00      |
| 6039      |         | Repair culvert (Thirty-second street, north of U street) .....       | 34.39     |
| 6040      |         | Various bridges, Mar. 16-31 .....                                    | 44.29     |
| 6041      |         | Various bridges, Apr. 1-15 .....                                     | 56.33     |
| 6042      |         | Construct bridge (Forty-seventh street NW., near Utica street) ..... | 69.28     |
| 6043      |         | Various bridges, Apr. 16-30 .....                                    | 18.63     |
| 6044      |         | Various bridges, May 1-15 .....                                      | 54.40     |
| 6045      |         | Various bridges, May 16-31 .....                                     | 24.94     |
| 6046      | 1       | Repairing abutment .....                                             | 131.96    |
| 6047      |         | Painting (Massachusetts avenue bridge) .....                         | 147.25    |
| 6049      | 55      | Repair railing .....                                                 | 52.48     |
| 6050      |         | Various bridges, June 16-30 .....                                    | 5.00      |
| 6051      | 30      | Repair .....                                                         | 1.25      |
|           | 55      | Lumber for floor (to be laid under appropriation for 1902) .....     | 2,316.60  |
|           |         | Trap-rock macadam .....                                              | 209.17    |
|           |         | Specifications .....                                                 | 10.75     |
|           |         | Miscellaneous labor .....                                            | 9.30      |
|           |         | Miscellaneous material .....                                         | 66.64     |
|           | 19      | Broad Branch bridge (now under construction) .....                   | 3,228.20  |
|           |         | Salaries .....                                                       | 630.00    |
|           |         | Inspection .....                                                     | 228.00    |
|           |         | Car tickets .....                                                    | 10.00     |
|           |         | Total .....                                                          | 15,378.25 |

Amount of appropriation ..... \$15,000.00  
 Repayments ..... 378.25  
 Total ..... 15,378.25

Respectfully submitted,

W. J. DOUGLAS,  
*Engineer of Bridges, District of Columbia.*

The COMPUTING ENGINEER DISTRICT OF COLUMBIA.

Respectfully transmitted to the Engineer Commissioner District of Columbia, through Capt. H. C. Newcomer.

C. B. HUNT.  
*Computing Engineer District of Columbia.*

REPORT OF THE SURVEYOR.

WASHINGTON, July 31, 1901.

SIR: In response to the general order of the honorable Commissioners to report upon the operations of the surveyor's office for the fiscal year closing June 30, 1901, and to make such recommendations as are found necessary for the improvement of the efficiency of the office, I have the honor to report as follows:

The salient feature of the past year's work in this office is the extraordinary increase in the demands of private citizens and the District officials for surveys, subdivisions, and information. More than ever before is this office depended on for every service within its scope by heads of other District departments, a consummation which the surveyor has invited whenever opportunity presented, the result being to largely diminish duplication of surveys, and to transfer directly to the individual needing it information attested by the surveyor officially, and therefore available for use in court or as the final statement of the Commissioners in any case dependent upon survey. This very proper use of the office has had great effect in the increase of work done. As to work for private parties, the

office has been taxed beyond its physical ability during the entire fiscal year, and will be in arrears for a month yet, even with the third field party just organized (August 1, 1901).

Taking up in detail the various principal divisions of the work of the office and the percentages of increase over last year, it is found that the number of individual recorded lots surveyed for private parties is 836, an increase of 36 per cent. Twenty-four unsubdivided parcels of land were surveyed. Three hundred and twenty-seven subdivisions were made in duplicate and recorded, an increase of nearly 40 per cent. Of suburban tracts, 6 were subdivided into blocks and lots. One thousand and nineteen estimates of cost were made out in triplicate, the resulting orders being entered on the order book, which shows a total of 1,019 orders for private parties for survey or subdivision, or both, or for plats of all sorts, an increase of 28 per cent. In preparation for surveys and subdivisions, 1,019 plats of whole or parts of squares were made up, an increase of 28 per cent. Six hundred and eighty survey certificate plats were issued, and the same number of duplicates entered on the books, an increase of 40 per cent. At least 400 sketch plats of subdivisions were made on request of the inspector of buildings preliminary to issuance of building permits. Eighty-two large plats were prepared, of which 30 were recorded for the District, covering dedications, etc.

Indorsements were made on 577 engineer department communications, and 51 plats were forwarded therewith, an increase of 37 per cent.

For the District, surveys were made in 75 localities, scattered all over the District, in city and county, fixing lines of all kinds of municipal real estate and to obtain data for reports. Ninety reports were made to the Engineer Commissioner (other than those by indorsement), of which 14 included plats. Two hundred and fifty of the 577 indorsements were upon as many different subjects relating to the engineer department.

During the year the two field parties expended 663 hours in surveys for the District, and three times as much, or 1,963 hours, for private parties; total, 372 days of 8 hours, or 59 days of extra time—19 per cent over and above the ordinary office hours—and the office force worked at least 25 per cent overtime. The relative amounts of time expended for the District and private parties by the office force are very difficult to differentiate, but it is certain that at least one-third of the office time is expended in answering questions and assisting those interested in real estate in the examination of the records, which is as it should be.

In addition to the plats above noted, many others of a temporary character, probably 300, were made, bringing the total up to about 4,200, an increase of 36 per cent.

Three hundred and sixty-three letters were written and copied, and at least 300 other letters were written, of less important nature and not requiring copying; total, 663. Probably 4,500 telephone calls were made or answered.

In view of the fact, as above noted, that the increase in various branches of the work ranges from 28 to 40 per cent and actually averages at least 36 per cent over the work of the previous fiscal year, which itself exceeded the one back of that by 20 per cent, the surveyor is justified in stating that the work can not in reason be handled by less than three field parties, fully manned and equipped, and an office force of at least the present size.

The growth of the subdivision work is shown by the following table:

#### SUBDIVISIONS MADE AND RECORDED.

|                           |     |
|---------------------------|-----|
| July, 1895, to July, 1896 | 83  |
| July, 1896, to July, 1897 | 128 |
| July, 1897, to July, 1898 | 122 |
| July, 1898, to July, 1899 | 172 |
| July, 1899, to July, 1900 | 229 |
| July, 1900, to July, 1901 | 327 |

During the entire fiscal year the field work was behind, and until May 15, when the deficiency appropriation was first utilized, the office work had also accumulated so heavily that the increased force then put on barely succeeded in bringing inside work up to date, a most vital thing in view of the fact that the copying of the new records into the permanent books should not be delayed any longer than the reasonable time which must be allowed in any office of record. Recently the effort has been to check off and sign the pages of the record books each month, the original papers being retired at once after copies are signed and filed in the fireproof vault. Three series of books are kept, one for the city, including Georgetown, one for the "county," for resubdivisions and small plats, and one for large subdivisions of suburban land and other bulky plats. These are the record books

proper, and in addition a most valuable series of certificate books of survey is kept by which every survey or plat of computation made since March 19, 1895, is preserved in precise duplicate in books on strong "bond paper," and by the aid of the card-index system is instantly available for public inspection. Plans are on foot to make this series of records of surveys in the near future very much more valuable than now to all landed interests.

Insufficient field force has made it practically useless to attempt the exceedingly important work of referencing valuable points of survey destroyed by street improvements. This is a deplorable loss, as whole days are often spent by a field party in what is often a vain endeavor to replace them. Hereafter it is hoped this loss may be stopped.

Turning to matters not purely statistical, the fact is noted that an interesting old landmark, the initial point or the corner of several original tracts west of Georgetown, known for many years as the "Dolly Barber tree," a huge poplar on the south side of the New Cut road, west of Foundry Branch, has recently fallen, and in order to preserve its exact site this office has placed a permanent monument in the center of the space once covered by the trunk (this monument carefully referred to auxiliary points recorded in the office notes) to secure the main point against possible vandalism. With sufficient field force and the constant and hearty cooperation of the sewer and surface departments, which is hereby acknowledged, the important work of saving the sites of landmarks and points of survey can be readily done, replacing them by permanent marks in new granolithic sidewalks, etc. For several years a scrapbook has been kept up, into which are placed newspaper clippings of every subject in any way of interest to the office, including also articles of historical value regarding the city and District. A careful index of all these is kept on cards. The constantly increasing value of such a collection is obvious. The progressive steps in all proceedings for opening streets and kindred subjects are thus kept close at hand for public information, as well as for the current work of the office.

A very important advance has been made in the card-index system of the office by the steady employment of a competent typewriting force for some months. As a result, a few more days work will complete the index of all subdivisions made in Washington City and in Georgetown since their establishment, over a century ago. By utilizing the thousands of cards, neatly and securely arranged in a library bureau file case, the public will be able to trace out on one or more cards the complete subdivisinal history of each square, going directly from the index to the precise page of the record book whereon the subdivision in question is plotted. The saving of labor by this system to all interested in real estate as owners, brokers, or title examiners is enormous, and incidentally the wear and tear on the books is reduced to the minimum. The crude old form of book index will be kept up also, at least for a while, for the benefit of the few people who may not readily adjust themselves to the card index. Experience in the case of the county card index, now for a year or so in use, shows that scarcely anyone asks for the book index. During the next two months the county card index of subdivisions will be completely transferred from temporary slips to typewritten cards.

Every individual fragment of information of value to the office as well as all the past and current work is being covered by the general index, which embraces the subheads of maps, deeds of District of Columbia real estate, survey certificates, etc., the whole so disposed as to be eventually thrown all in together in one case in alphabetical order.

In March last, through the appropriation made by the last Congress, the entire Brewer collection of maps and notes came into possession of the office, and is found well worth the cost. Nearly all of the 300 or 400 maps of this collection have been cross-indexed, numbered, stamped, and located in the card index. As to the field and office notes, their distribution by squares was accomplished by the personal work of the surveyor at home, the time occupied therein being from 7 to 11 or 12 p. m. at least four nights of each week for nearly two months and a half. This immense collection of papers, thousands in number, and covering practically all surveys made in Georgetown for at least twenty-five years, had no arrangement except that made partially in accord with "Old Georgetown" and the various subdivisions and additions. The task of arrangement into something like reasonable readiness for use seemed at the outset almost interminable, and the present arrangement will require considerable revision, though the office can now reach essential data without too long a search. This work done at the office would have been finished in about four years, assuming a continuance of the present demands upon the time and energies of the surveyor during office hours.

Another matter engaging the personal attention of the surveyor, through many

nights of extra work, is the gradual overhauling and indexing of a mass of valuable papers, stored in the surveyor's office at the time of the extinction of Georgetown as a separate municipality and never indexed or inventoried since that distant date. So far many valuable documents have been found, enough to indicate the probability that practically all of these archives of Georgetown of interest to the surveyor's office are in the mass. Already from these papers has considerable light been shed upon the time and manner of the opening of the Georgetown streets. Apparently all the old-grade sheets of street improvements for over a century are there, enabling reproductions to be made of original profiles before any grading had been done.

I renew my recommendation of previous annual reports for \$2,000 for a resurvey of Beatty & Hawkin's addition to Georgetown on the basis of the holdings. It is needless to descant upon the imperative need of this.

I also renew my recommendation for an appropriation of \$2,000 for a complete relocation of the boundary line of the District, monuments to be placed at all road crossings and at other salient points.

Congress having appropriated \$2,000 for a resurvey of Barry farm, the work will begin in September and will be pushed to completion so far as the funds will permit.

During the year a series of five old maps, showing the original surface profiles on centers of most of the streets of the central and southern parts of the city, and also a scheme of grades, apparently made by Nicholas King in 1797, have been traced and thus essentially preserved, the originals being in the last stages of dilapidation. Several other important old maps of the original design of the city should be photolithographed to preserve them from utter loss. I recommend that \$300 be appropriated for this purpose.

The attempt to crowd into the very limited fireproof vault of the office the voluminous Brewer collection impels me to ask for \$100 for the enlargement of the metal map and file-case plant, all of which will be available in a new municipal building. Scores of valuable maps can not now be kept in the fireproof vault, for lack of room. The space now occupied by this office in the old city hall has now become, by increase in every division of the work, so crowded, even for the employees alone, that public business is retarded, and the increasing number of citizens who wish to examine the records have often not even space to spread out books for examination. There is no space whatever for those who wish to copy and trace from the records. The crying need for a decent municipal building is shown as plainly in this office as in any other. By the courtesy of the clerk of the supreme court this office has been loaned the temporary use of a room in the basement, which has been of great help, though but one man can work therein with natural light. As this office is in the city hall by sufferance merely, and is liable to be forced out altogether by the needs for space for the courts, the surveyor is thankful that he is allowed to remain at all, as the rooms are good and convenient, but in aggregate space not half large enough.

I wish to place on record my earnest recommendation that the appropriation for this office be made ample for the maintenance of just as many field parties as the work demands. In this day of rapid consummation of deals in real estate, time is a vital factor, and the general public should, in my judgment, be able to secure a report from this office in all ordinary cases inside of forty-eight hours, as to surveys of location of walls, etc., and no delay whatever should be permitted due to insufficient force. The exasperating experience of the past record-breaking season leads me to hope that never again shall the office be compelled to "make bricks without straw."

At least the incumbents of seven of the more important positions in the office should be placed on the permanent roll, especially in the cases of the chief clerk and assistant engineer.

The present force is worthy of the highest praise for its industry, accuracy, and general efficiency. The work accomplished is proof enough of this, and every man takes a personal pride in the character of the work turned out.

When the office was organized on its present basis, in 1895, the Commissioners had asked that the salary of the surveyor be fixed at \$3,600 and that of the assistant surveyor at \$1,800. As the law was passed the surveyor is given \$3,000 and the assistant \$1,800. Since that date the personnel of the office has doubled, the amount of work turned out has trebled and quadrupled in some respects, the fees turned into the District treasury have doubled, and the general importance and responsibility of the office has so very largely enhanced that now that the present surveyor has a reasonable hope of proper provision for every other need of the office, which has been his incessant effort for years to secure, he deems it not improper that he should recommend that the salaries of the surveyor and the assistant surveyor be increased to a point more commensurate with those of other heads

of departments in the District service and more in accord with the exceedingly heavy personal responsibility laid upon each, whose character is well known to the Board of Commissioners, and which is radically different from the responsibility of any other head of a department. Direct financial responsibility for any error that may occur by reason of the least break on the part of any subordinate is, in its last analysis, the burden carried daily by the surveyor, who can not possibly see everything of what is going on under his supervision. He can only institute and maintain such systems of checks as he finds practicable. The work of the assistant, which is chiefly the location of all lots and walls in the city proper, is most exacting and responsible. I recommend an increase to \$3,600 for the surveyor and \$2,500 for the assistant, these figures being nearer the ordinary commercial value of the professional services rendered the community by the two engineers required for the duty.

Very respectfully,

HENRY B. LOOKER,  
*Surveyor District of Columbia.*

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.  
(Through Captain Newcomer.)*

### REPORT OF THE SUPERINTENDENT OF PARKING.

SIR: I have the honor to submit the following report of work performed under the supervision of this office during the fiscal year ending June 30, 1901.

Three thousand one hundred and twenty-five trees were planted on the public streets of the District, being 968 more than were planted during the previous fiscal year and more than have been planted in one season in the last fifteen years. These consisted of 983 sycamores, 863 soft maples, 491 Norway maples, 258 sugar maples, 228 American lindens, 122 American elms, 85 Salisburias, 75 pin oaks, 12 willow oaks, and 8 tulip trees.

Of this number, 2,767 were planted at public expense, and in accordance with instructions received, in filling vacant spaces in existing lines of trees previously planted. Three hundred and fifty-eight trees were planted at the cost of individuals under the permit system, the trees being furnished by the District, and the expense of preparing tree boxes, tree holes, and planting of trees being at cost of applicants.

The work of tree planting is necessarily of a scattered nature, but the order of June 30, 1900, requiring all existing gaps to be filled before attempting to plant new lines, permitted this work to be done in a far more systematic manner than ever before, and accounts for the increase of the number planted.

A portion of ground, consisting of about 5 acres, on Iowa avenue having been allotted to the parking commission for use as a nursery, this has been fenced, put under cultivation, and planted with 7,000 young trees. Large seed beds have been prepared and sown with the seeds of the varieties of trees considered most desirable for street culture, and the seedlings are now doing well.

One of the largest items in the list of annual expenditures is that of trimming trees, and of necessity, in justice to the trees, it must continue to increase. There are thousands of trees on the street, and particularly those planted near the curbing, that have attained a stage in their development and environment that necessitates trimming, and in very many cases severe trimming, if they are to be preserved. Trees planted at the curbing of a modern street are existing under conditions far less favorable for their welfare than similar trees planted in an open field. Surrounded as they are in very many instances by an air-tight and waterproof pavement, they naturally often suffer from lack of a sufficient supply of moisture at their roots. Their roots can not maintain a growth previously made during the existence of conditions more favorable (as, for instance, before the numerous cement sidewalks were laid); large limbs die back toward the trunks and present an ugly and neglected appearance. The only remedy is judicious trimming, and the entire amount of an annual appropriation would not be sufficient to complete the work of this character that needs to be done throughout the city.

Eight hundred and twenty-one trees were for various reasons removed from the streets. Many of these were killed by the resetting of curbing. Unfortunately, in the prosecution of this work the largest and finest trees usually suffer the most, having the largest root development. In cases where this work is contemplated on streets planted with large trees, particularly where grade is to be changed considerably, it would often be better, from an economic and æsthetic standpoint,

to remove the trees entirely and replace them when the sidewalk was relaid. This would often permit the trees to be more evenly spaced, and sometimes the planting of a more desirable variety. The young trees planted on the streets thus treated, growing under similar conditions, would present a more uniform appearance than where planted here and there among the existing old ones. In all cases trees should receive a trimming commensurate with their root mutilation, and the sooner this is done after the pavement is laid the better.

Among those removed because of street alteration were 79 from G street, between Sixth and Eleventh streets NW.; 11 from Fifth street, between F and G streets NW.; 22 from D street, between Ninth and Thirteenth streets NE.; 12 from G street, between Fifth and Sixth streets NW.; 15 from R street, between Thirty-second and Thirty-fourth streets NW.; 19 from Ninth street, between A and East Capitol streets SE.; 10 from Fifth street, between D and E streets NW.; 9 from Tennessee avenue, between B and Lincoln Park.

During the year no wire netting for the protection of trees from horses was purchased, and as a resulting sequence scores of young trees have been seriously injured, and in many cases irrevocably ruined. Trees, particularly of the soft-wooded varieties, once badly gnawed by horses, soon begin to decay at the place of damage, and the rotting continues until the inside of the trees becomes a hollow shell. There are several thousands of trees in the city approaching this condition, particularly soft maples and Carolina poplars, and experience has shown that horse-eaten trees are the worst sufferers during the annual autumnal storms.

Three hundred and seventy trees were wired by using the old wires taken from trees removed, and the greater portion of the city gone over and wires readjusted to accommodate the increased growth of the trees.

## DISTRIBUTION OF WORK.

|                                                                                                                                                                                |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Appropriation for year ending June 30, 1901 .....                                                                                                                              | \$22,500.00     |
| Repayment vouchers .....                                                                                                                                                       | 1,597.12        |
|                                                                                                                                                                                | <hr/> 24,097.12 |
| Work at office in repairing tools, tree boxes, and damages reported by Metropolitan police department, etc .....                                                               | \$613.50        |
| Work at old nursery, making tree boxes, general cultivation of stock, preparing seed beds, transplanting seedlings, digging trees, and trimming for street planting, etc ..... | 2,091.07        |
| Work at new nursery, fencing and cultivating .....                                                                                                                             | 197.68          |
| Trimming trees .....                                                                                                                                                           | 2,429.10        |
| Digging tree holes .....                                                                                                                                                       | 4,896.96        |
| Planting trees .....                                                                                                                                                           | 1,790.32        |
| Paving around tree spaces .....                                                                                                                                                | 876.74          |
| Removing trees .....                                                                                                                                                           | 1,733.56        |
| Cultivating trees .....                                                                                                                                                        | 1,810.23        |
| Rewiring and readjusting wires .....                                                                                                                                           | 1,098.86        |
| Strapping .....                                                                                                                                                                | 216.00          |
| Care of parkings .....                                                                                                                                                         | 1,582.41        |
| Removing caterpillars .....                                                                                                                                                    | 388.37          |
| Removing old boxes .....                                                                                                                                                       | 25.50           |
| Gathering seed .....                                                                                                                                                           | 67.40           |
| Attending to police reports (broken limbs) .....                                                                                                                               | 143.27          |
|                                                                                                                                                                                | <hr/> 19,960.97 |
| Material: Timber for boxes, straps, soil, nails, staples, tools, and other miscellaneous articles .....                                                                        | 4,111.90        |
|                                                                                                                                                                                | <hr/> 24,072.87 |
|                                                                                                                                                                                | <hr/> 24.25     |
| Balance unexpended .....                                                                                                                                                       |                 |
| From the emergency fund the sum of \$499.74 was used in the eradication of caterpillars.                                                                                       |                 |
| Four foremen, at \$3 per diem, were employed, \$3,516.                                                                                                                         |                 |
| The number of trees on streets as per last report was .....                                                                                                                    | 80,297          |
| The number of trees removed during the year .....                                                                                                                              | 821             |
|                                                                                                                                                                                | <hr/> 79,406    |
| Number planted during the year .....                                                                                                                                           | 3,125           |
|                                                                                                                                                                                | <hr/> 82,531    |
| Total now on the streets .....                                                                                                                                                 |                 |

Four thousand seven hundred and twenty-three spaces around small or recently planted trees have been cultivated, and, in compliance with instructions received, have been sowed with the seed of white clover.

Three thousand five hundred boxes were made at the District nursery and used in planting trees and protecting small trees whose boxes had been broken by horses, storms, etc.

Respectfully submitted.

TRUEMAN LANHAM,  
*Superintendent Parking.*

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,*  
*Engineer Commissioner District of Columbia.*  
(Through Captain Newcomer.)

## SUBSURFACE AND BUILDING DIVISIONS.

Capt. CHESTER HARDING.

*Corps of Engineers, United States Army, Assistant to the Engineer Commissioner, in charge.*

|                                         |                                                                                         |
|-----------------------------------------|-----------------------------------------------------------------------------------------|
| WATER DISTRIBUTION.....                 | W. A. MCFARLAND,<br><i>Superintendent Water Department.</i>                             |
| WATER RATES.....                        | GEORGE F. GREEN,<br><i>Water Registrar and Chief Clerk,</i><br><i>Water Department.</i> |
| SEWER CONSTRUCTION AND MAINTENANCE..... | D. E. MCCOMB,<br><i>Superintendent of Sewers.</i>                                       |
| PLUMBING PLANS AND INSPECTION.....      | CHARLES B. BALL,<br><i>Inspector of Plumbing.</i>                                       |
| BUILDING AND BUILDING INSPECTION.....   | J. B. BRADY,<br><i>Inspector of Buildings.</i>                                          |
|                                         | A. M. LAWSON,<br><i>Inspector of Elevators.</i>                                         |
| REPAIRS TO BUILDINGS.....               | G. B. COLEMAN,<br><i>Superintendent of Repairs.</i>                                     |

## REPORT OF ASSISTANT IN CHARGE.

OFFICE OF THE ENGINEER COMMISSIONER,  
DISTRICT OF COLUMBIA,  
*Washington, October 2, 1901.*

CAPTAIN: I have the honor to forward herewith the reports of the superintendent of the water department, the water registrar, the superintendent of sewers, the inspector of plumbing, the inspector of buildings, and the superintendent of repairs for the year ending June 30, 1901.

These divisions of the engineer department were under the immediate charge of Capt. D. D. Gaillard, United States Corps of Engineers, until about March 1, 1901, and were assigned to my charge on May 6, 1901.

Very respectfully, your obedient servant,

CHESTER HARDING,  
*Captain, Corps of Engineers,*  
*Assistant to Engineer Commissioner.*

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,*  
*Engineer Commissioner District of Columbia.*

## REPORT OF THE SUPERINTENDENT OF THE WATER DEPARTMENT.

WASHINGTON, D. C., *August 7, 1901.*

CAPTAIN: I have the honor to submit the following summary of work done by the distribution branch of the water department for the fiscal year ending June 30, 1901.

For a statement of mains laid, with their cost, together with other routine work attention is invited to the accompanying tables, which are self explanatory: a will be seen, the total length of new mains laid, of all sizes, was 65,812 feet, or about 12.5 miles.

The most important construction work of the year was the completion of the

north basin of the Brightwood reservoir, which was put in service in December, 1900, and has been continually in use since that time. The capacity of this reservoir is now 31,000,000 gallons, of which 30,000,000 are available for use. The basins are so designed that the final draining can not occur through the mains to the city.

Contract has been entered into for the construction of two reservoir gate houses of granite, and the work of grading and road construction about the reservoir is nearly completed.

During the early part of the year a small direct-service pumping station was established in Anacostia; for equipping this station boilers and pump were removed from the old Q street station in Georgetown, which has not been in service for a number of years past. This new station, with a maximum capacity of 1,500,000 gallons per day, was put in operation thirty-five days after beginning work of excavation for foundations; it has been in continuous use since installation, and is delivering water at a height of about 180 feet above tide level. When supplied by gravity the water in this part of the District reached a height of only about 120 feet above tide.

There have been no changes of importance in the equipment of the U street pumping station during the year. Following are principal data of interest from pumping station records:

|                                                   |                 |           |
|---------------------------------------------------|-----------------|-----------|
| Water pumped during year, middle service .....    | million gallons | 2,632.4   |
| High service .....                                | do.             | 96        |
| Total .....                                       |                 | 2,728.4   |
| Per cent increase over year ending June 30, 1900: |                 |           |
| Middle service .....                              |                 | 8.43      |
| High service .....                                |                 | 27.47     |
| Both services .....                               |                 | 9.04      |
| Water pumped per day, mean for year:              |                 |           |
| Middle service .....                              |                 | 7,228,561 |
| High service .....                                |                 | 263,147   |
| Total .....                                       |                 | 7,491,708 |
| Coal burned during year .....                     | pounds          | 4,381,163 |
| Coal burned per day, mean .....                   | do.             | 12,003    |
| Cost of coal per year .....                       |                 | \$6,299   |
| Cost of coal per day, mean .....                  |                 | \$17.25   |

*Cost of pumping during year.*

|                                                                                                         |       |             |
|---------------------------------------------------------------------------------------------------------|-------|-------------|
| Running expenses at station:                                                                            |       |             |
| Labor .....                                                                                             |       | \$11,648.00 |
| Coal .....                                                                                              |       | 6,299.06    |
| Oil .....                                                                                               |       | 373.45      |
| Waste .....                                                                                             |       | 183.57      |
| Miscellaneous supplies .....                                                                            |       | 1,755.35    |
| Material used in repairs .....                                                                          |       | 828.81      |
| Total .....                                                                                             |       | 21,088.24   |
| Per day, mean .....                                                                                     |       | \$57.78     |
| Cost of land .....                                                                                      |       | 2,275.00    |
| Cost of building .....                                                                                  |       | 30,000.00   |
| Cost of machinery .....                                                                                 |       | 75,000.00   |
|                                                                                                         |       | 107,275.00  |
| Interest at 3 per cent .....                                                                            |       | 3,218.25    |
| Depreciation, building and machinery .....                                                              |       | 3,150.00    |
| Grand total .....                                                                                       |       | 27,456.49   |
| Per day .....                                                                                           |       | 75.22       |
| Total cost of pumping 1,000 gallons under actual conditions (including interest and depreciation) ..... | cents | 1.004       |
| Corresponding cost per 1,000 gallons for year ending June 30, 1900 .....                                | do.   | 1.003       |



Competitive designs for a new pumping station building to be erected on Trumbull street were received from a number of architects on August 1. Those submitted by Mr. Henry Brauns, of Baltimore, Md., were accepted, and detailed plans and specifications for the building were prepared by him. This work will be advertised early in the ensuing fiscal year, and the work of construction will, it is hoped, be practically completed not later than June 30, 1903.

Plans and specifications have been made for steam generating equipment, and for water gates for this station, and bids for this work also will be asked at an early date.

During the fiscal year ending June 30, 1902, the principal work contemplated by this department, other than ordinary routine construction, maintenance, and repair, is as follows:

Building of gate houses and completion of roads, grading and fencing at Brightwood Reservoir.

Excavation for foundation of Trumbull street pumping station.

Execution of contract for building and for a large part of the mechanical equipment, and commencement of work of construction.

Laying of 48-inch suction mains to connect new station with Howard University Reservoir, and alteration of mains on Capitol Hill in anticipation of an extension of the high-service system to this locality.

In the matter of office records an important work accomplished was the completion of a duplicate set (about 300 sheets each 22 by 30 inches) of 50-foot scale maps giving locations of water mains over the entire District; this duplicate set of maps has been stored at the U street pumping station as a precaution against loss by fire; such a loss could never be fully repaired.

An additional record of much importance has been begun. This is a card index, on cards of 8 by 10 inches each, intended to give exact location of and all available data relating to every water gate on both supply and distribution systems of water supply throughout the District; this is a work of considerable magnitude and will probably require several years to perfect; a party of three men is engaged exclusively on this work and is making satisfactory progress. The card index covering all available data relating to fire hydrants has been continued and is proving of much value.

In conclusion I wish to record my appreciation of the efficient work done by the various employees of this department.

Very respectfully,

W. A. MCFARLAND,  
*Superintendent Water Department.*

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,*  
*Engineer Commissioner District of Columbia.*  
(Through Captain Harding.)

TABLE I.—Mains laid and miscellaneous work during the fiscal year ending June 30, 1901.

|                                      |             |        |
|--------------------------------------|-------------|--------|
| New mains laid:                      |             |        |
| 12 inches diameter                   | linear feet | 10,026 |
| 6 inches diameter                    | do          | 51,477 |
| 4 inches diameter                    | do          | 2,187  |
| 3 inches diameter                    | do          | 935    |
| 2 inches diameter                    | do          | 0      |
| 1½ inches diameter                   | do          | 646    |
| 6-inch connections to fire hydrants  |             | 1,096  |
| Mains lowered                        |             | 3,013  |
| New stop valves                      |             | 191    |
| Fire hydrants erected                |             | 75     |
| Fire hydrants moved to new locations |             | 7      |
| Public hydrants erected              |             | 10     |
| Fountains erected                    |             | 5      |

TABLE II.—*Summary of the distribution system.*

|                           |              | In service<br>prior to<br>June 30,<br>1901. | Added<br>during fis-<br>cal year. | Total June<br>30, 1901. |
|---------------------------|--------------|---------------------------------------------|-----------------------------------|-------------------------|
| 75 inches diameter .....  | linear feet. | 600                                         |                                   | 600                     |
| 48 inches diameter .....  | do.          | 30,000                                      |                                   | 30,000                  |
| 36 inches diameter .....  | do.          | 34,082                                      |                                   | 34,082                  |
| 30 inches diameter .....  | do.          | 37,720                                      |                                   | 37,720                  |
| 24 inches diameter .....  | do.          | 21,545                                      |                                   | 21,545                  |
| 20 inches diameter .....  | do.          | 36,366                                      |                                   | 36,366                  |
| 16 inches diameter .....  | do.          | 2,508                                       |                                   | 2,508                   |
| 12 inches diameter .....  | do.          | 192,517                                     | 10,026                            | 202,543                 |
| 10 inches diameter .....  | do.          | 10,255                                      |                                   | 10,255                  |
| Total trunk mains .....   |              |                                             |                                   | 375,679                 |
| 8 inches diameter .....   | linear feet. | 6,005                                       |                                   | 6,005                   |
| 6 inches diameter .....   | do.          | 1,389,069                                   | 52,018                            | 1,441,087               |
| 4 inches diameter .....   | do.          | 129,695                                     | 2,187                             | 131,882                 |
| 3 inches diameter .....   | do.          | 60,500                                      | 935                               | 61,435                  |
| 2 inches diameter .....   | do.          | 4,118                                       |                                   | 4,118                   |
| 1½ inches diameter .....  | do.          | 3,156                                       | 646                               | 3,802                   |
| Grand total .....         |              | 1,958,193                                   | 65,812                            | 2,024,005               |
| Stop valves .....         | number.      | 4,037                                       | 191                               | 4,228                   |
| Fire hydrants .....       | do.          | 1,956                                       | 75                                | 2,031                   |
| Public hydrants .....     | do.          | 333                                         | 10                                | 343                     |
| Service connections ..... | do.          | 45,191                                      | 1,388                             | 46,579                  |
| Horse fountains .....     | do.          | 81                                          | 5                                 | 86                      |

<sup>1</sup>7,504 feet 6-inch main abandoned on account of electric railway construction.<sup>2</sup>10 public hydrants abandonedTABLE III.—*Statement showing cost of water mains laid during the fiscal year ending June 30, 1901.*

| Location.                                                                                                                    | Size.   | Length. | Cost of<br>material. | Cost of<br>labor. | Total cost. |
|------------------------------------------------------------------------------------------------------------------------------|---------|---------|----------------------|-------------------|-------------|
|                                                                                                                              | Inches. | Feet.   |                      |                   |             |
| Square 369 .....                                                                                                             | 3       | 102.1   | \$28.77              | \$30.14           | \$58.91     |
| Square 503 .....                                                                                                             | 3       | 112.1   | 50.38                | 26.00             | 76.38       |
| Square 44 .....                                                                                                              | 3       | 329.3   | 106.63               | 76.75             | 183.38      |
| Square 508 .....                                                                                                             | 3       | 72.6    | 12.57                | 35.20             | 47.77       |
| Square 469 .....                                                                                                             | 4       | 377.1   | 131.71               | 108.91            | 240.62      |
| Bridge street, north from Highland avenue .....                                                                              | 4       | 129     | 56.99                | 53.15             | 110.14      |
| Square 576 .....                                                                                                             | 4       | 234.7   | 154.12               | 138.85            | 292.97      |
| Square 293 .....                                                                                                             | 4       | 225.8   | 99.78                | 84.87             | 184.65      |
| Center Sheridan street, east from Piney Branch road .....                                                                    | 4       | 181.6   | 62.32                | 52.18             | 114.50      |
| Scott street, west from Valley NW .....                                                                                      | 4       | 215     | 91.49                | 58.91             | 150.40      |
| Alley, square 234 .....                                                                                                      | 4       | 164.2   | 85.69                | 78.18             | 163.87      |
| South side Massachusetts avenue, west from Sheridan circle NW .....                                                          | 6       | 180     | 72.33                | 49.00             | 121.33      |
| North side of R street, between Nineteenth and Twentieth streets NW .....                                                    | 6       | 249.4   | 119.50               | 66.88             | 186.38      |
| Center of Seaton street, west from North Capitol street NW .....                                                             | 6       | 205     | 248.48               | 92.56             | 341.04      |
| Center of Richmond street, north from Woodley road NW .....                                                                  | 6       | 372.5   | 172.19               | 68.25             | 240.44      |
| Center of Woodley road, east from Idaho avenue NW .....                                                                      | 6       | 255     | 185.10               | 56.18             | 241.28      |
| Center of Princeton, west from Sherman avenue NW .....                                                                       | 6       | 123.4   | 66.56                | 34.01             | 100.57      |
| North side of South Carolina avenue, from Eleventh to Twelfth streets SE .....                                               | 6       | 378.1   | 217.43               | 119.06            | 336.49      |
| Center of Flint street, from Fifth to Ninth streets, Brightwood Park .....                                                   | 6       | 1,623   | 811.49               | 226.58            | 1,038.07    |
| Center of L street, from Twelfth to Fourteenth streets SE .....                                                              | 6       | 800.5   | 368.87               | 176.86            | 545.73      |
| Center of D street, between Twenty-second and Twenty-third streets NW .....                                                  | 6       | 44.9    | 20.59                | 15.37             | 35.96       |
| Center of Omaha street, between Twelfth and Thirteenth streets, Brookland .....                                              | 6       | 465.4   | 256.05               | 94.11             | 350.16      |
| Center of Fourteenth street, from D street to Tennessee avenue, and center of D street, east from Fourteenth street NE ..... | 6       | 454.6   | 221.24               | 156.82            | 378.06      |
| West side of Eighteenth street, between Oregon avenue and S street NW .....                                                  | 6       | 120.8   | 72.18                | 42.52             | 114.70      |

TABLE III.—Statement showing cost of water mains, etc.—Continued.

| Location.                                                                                                                                                                                                   | Size.          | Length.      | Cost of material. | Cost of labor. | Total cost. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------|-------------------|----------------|-------------|
|                                                                                                                                                                                                             | <i>Inches.</i> | <i>Feet.</i> |                   |                |             |
| North side of Cincinnati street, opposite Nineteenth street NW                                                                                                                                              | 6              | 54           | \$23.05           | \$11.13        | \$34.18     |
| North side of D street, west from North Capitol street NW                                                                                                                                                   | 6              | 169.8        | 127.95            | 89.27          | 217.22      |
| Center of Chesapeake street, between Brightwood and Illinois avenues                                                                                                                                        | 6              | 163.3        | 70.29             | 35.12          | 105.41      |
| Center of Newark street, between Thirty-third and Thirty-sixth; center of Thirty-third, between Newark street and Highland avenue; center of Highland avenue, east from Thirty-third street, Cleveland Park | 6              | 2,867.7      | 1,559.44          | 669.38         | 2,228.82    |
| Center of Richmond street, south from Woodley street NW                                                                                                                                                     | 6              | 277          | 129.51            | 38.06          | 167.57      |
| Center of S street, between First and Second streets NW                                                                                                                                                     | 6              | 12           | 6.51              | 7.30           | 13.81       |
| North side of Cincinnati street, between Eighteenth and Nineteenth streets NW                                                                                                                               | 6              | 31.5         | 13.94             | 15.81          | 29.75       |
| East side Twenty-sixth, from K to L streets NW                                                                                                                                                              |                |              |                   |                |             |
| East side Twenty-sixth, from Virginia avenue to I street NW                                                                                                                                                 |                |              |                   |                |             |
| North side of F street, from Twenty-fourth street to Twenty-fifth street NW                                                                                                                                 |                |              |                   |                |             |
| North side of F street, from Twenty-second street to Twenty-third street NW                                                                                                                                 | 6              | 3,423.3      | 2,416.25          | 1,450.47       | 3,866.72    |
| North side of F street, from Twenty-first to Twenty-second streets NW                                                                                                                                       |                |              |                   |                |             |
| North side of G street, from Eighteenth to Nineteenth streets NW                                                                                                                                            |                |              |                   |                |             |
| North side of G street, from Twenty-second to Twenty-third streets NW                                                                                                                                       |                |              |                   |                |             |
| West side of Third, north from L NW                                                                                                                                                                         | 6              | 124.5        | 93.38             | 47.10          | 140.48      |
| Center of Philadelphia street, from Eighth street to Brightwood avenue NW                                                                                                                                   | 6              | 448          | 184.80            | 113.65         | 298.45      |
| Center of Providence street, from Thirteenth to Fifteenth streets, Brookland                                                                                                                                | 6              | 1,266.8      | 654.19            | 473.55         | 1,127.74    |
| West side of Twelfth, from E street to Maryland avenue NE                                                                                                                                                   | 6              | 477.8        | 265.72            | 197.04         | 462.76      |
| Center of Erie street, from Champlain avenue to Ontario avenue; center of Ontario avenue, south from Erie                                                                                                   | 6              | 659.2        | 378.08            | 140.84         | 518.92      |
| Center of Seaton street, east from First street NW                                                                                                                                                          | 6              | 326.5        | 152.37            | 86.77          | 239.14      |
| West side of Flagler street, from U street to Albany street NW                                                                                                                                              | 6              | 1,482        | 838.25            | 208.49         | 1,046.74    |
| Center of Erie street, from Fifteenth to Sixteenth streets NW                                                                                                                                               | 6              | 330.2        | 199.17            | 192.52         | 391.69      |
| East side New Jersey avenue, crossing K street SE                                                                                                                                                           | 6              | 209.5        | 89.38             | 59.82          | 149.20      |
| East side of South Capitol street, from O street to Q street SE                                                                                                                                             | 6              | 900          | 488.15            | 205.86         | 694.01      |
| Center of Fifteenth street, from Morris street to Huron street NW                                                                                                                                           | 6              | 1,082.6      | 467.40            | 303.22         | 770.62      |
| East side of Florida avenue, south from W street NW                                                                                                                                                         | 6              | 196          | 78.79             | 53.35          | 132.14      |
| North side of U street, from Flagler street to Second street NW                                                                                                                                             | 6              | 227.4        | 124.91            | 41.85          | 166.67      |
| Center of Seaton street, between First and Second streets NW                                                                                                                                                | 6              | 246.5        | 107.50            | 73.37          | 180.87      |
| Center of Maple avenue, from Nichols avenue to Spring road, Anacostia                                                                                                                                       | 6              | 417.4        | 238.88            | 110.34         | 349.22      |
| Center of Pierpont street, east from Wisconsin avenue NW                                                                                                                                                    | 6              | 296.4        | 138.92            | 93.91          | 232.83      |
| South side of East Capitol street, from Fifteenth street SE                                                                                                                                                 | 6              | 96           | 55.68             | 25.00          | 80.68       |
| South side G street, between Twenty-third and Twenty-fourth NW                                                                                                                                              | 6              | 368.2        |                   |                |             |
| East side of Twenty-fifth, between H and I streets NW                                                                                                                                                       | 6              | 414.9        | 1,567.49          | 723.59         | 2,291.08    |
| East side of Twenty-fifth, between I and K streets NW                                                                                                                                                       | 6              | 663.1        |                   |                |             |
| East side of Twenty-fifth, between K and Pennsylvania avenue NW                                                                                                                                             | 6              | 361.6        |                   |                |             |
| East side of Florida avenue, at Vermont avenue NW                                                                                                                                                           | 6              | 224          | 97.61             | 55.00          | 152.61      |
| Center of Maple avenue, from Spring street to High street, Anacostia                                                                                                                                        | 6              | 776          | 352.17            | 190.35         | 542.52      |
| Center of Twelfth street, between Detroit and Emporia streets, Brookland                                                                                                                                    | 6              | 111.4        | 47.67             | 42.43          | 90.10       |
| West side of North Capitol street, north from Randolph street                                                                                                                                               | 6              | 124          | 63.24             | 26.05          | 89.29       |
| North side of U street, between Flagler and First NW                                                                                                                                                        | 6              | 100.6        | 57.34             | 19.25          | 76.59       |

TABLE III.—Statement showing cost of water mains, etc.—Continued.

| Location.                                                                                                                                            | Size.         | Length.      | Cost of material. | Cost of labor. | Total cost. |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|-------------------|----------------|-------------|
|                                                                                                                                                      | <i>Inches</i> | <i>Feet.</i> |                   |                |             |
| West side of First, between B and C streets NE ..                                                                                                    | 6             | 541.2        | \$278.84          | \$179.87       | \$458.71    |
| East side of First street, north from Patterson street NE ..                                                                                         | 6             | 40.3         | 33.20             | 8.75           | 41.95       |
| East side of Twelfth, from E to F streets NE ..                                                                                                      | 6             | 450.3        | 183.43            | 109.23         | 292.66      |
| North side Georgia avenue, east from Twelfth SE.                                                                                                     | 6             | 188.8        | 126.85            | 38.50          | 165.35      |
| Center of Third street, from R street to Quincy street NE.; center of Quincy street, west from Third street NE ..                                    | 6             | 571.4        | 324.85            | 148.62         | 473.47      |
| Center of Q street, from Twenty-first street to Massachusetts avenue NW ..                                                                           | 6             | 220          | 237.93            | 93.51          | 331.44      |
| Center of Thirteenth street, north from D street SE ..                                                                                               | 6             | 273          | 121.13            | 69.18          | 190.31      |
| East side of New Jersey avenue, between New York avenue and L street NW ..                                                                           | 6             | 476          | 233.70            | 196.17         | 429.87      |
| East side of Lincoln avenue, north from R street NE ..                                                                                               | 6             | 282.8        | 157.30            | 100.11         | 257.41      |
| Center of Twelve-and-a-half street, between Band C NE ..                                                                                             | 6             | 116.8        | 54.44             | 19.06          | 73.50       |
| Center of W street, between Fourth and Fifth streets NE ..                                                                                           | 6             | 121.8        | 67.88             | 17.25          | 84.93       |
| Center of Bismarck street, between Brightwood and Sherman avenues NW ..                                                                              | 6             | 352          | 147.88            | 94.93          | 242.81      |
| West side of Fifteenth street, between G street and Maryland avenue NE ..                                                                            | 6             | 158.2        | 101.65            | 76.93          | 178.58      |
| Center of Highland avenue, Cleveland Park ..                                                                                                         | 6             | 89.7         | 43.35             | 34.00          | 77.35       |
| Center of Twenty-first street, between C street and New York avenue NW ..                                                                            | 6             | 301.4        | 191.90            | 61.24          | 253.14      |
| Center of Kenesaw avenue, west from Sixteenth street NW ..                                                                                           | 4             | 5.5          | 191.87            | 105.00         | 296.87      |
|                                                                                                                                                      | 6             | 433          |                   |                |             |
| North side of U street, between First and Second streets NW ..                                                                                       | 6             | 238.7        | 113.79            | 54.07          | 167.86      |
| Center of Thirty-first street, between K street and Chesapeake and Ohio Canal NW ..                                                                  | 6             | 57.6         | 26.43             | 114.05         | 140.48      |
| Center of Sixth street, between D street and Louisiana avenue NW ..                                                                                  | 6             | 238.9        | 216.78            | 168.64         | 385.42      |
| East side Thirteen-and-a-half street, between D and E NW ..                                                                                          | 6             | 247.1        | 148.76            | 103.45         | 252.21      |
| Center of Spring street, between Maple avenue and Morris street, Anacostia ..                                                                        | 6             | 275.4        | 123.01            | 51.85          | 174.86      |
| Center of Sherman avenue, between Princeton and Bismarck streets, NW ..                                                                              | 6             | 232          | 105.98            | 65.25          | 171.23      |
| Center of Thirty-first street, between South street and Chesapeake and Ohio Canal NW ..                                                              | 6             | 152          | 64.48             | 76.28          | 140.76      |
| North side of D street, between Ninth and Tenth streets NE ..                                                                                        | 6             | 291.5        | 125.42            | 93.89          | 219.31      |
| South side of California avenue, between Eighteenth street and Florida avenue NW ..                                                                  | 6             | 373.6        | 180.57            | 96.02          | 276.59      |
| West side of H street, between D and E streets NE ..                                                                                                 | 6             | 473.8        | 249.93            | 149.30         | 399.23      |
| Center of Seaton street, between Third and Fourth streets NE ..                                                                                      | 6             | 467.3        | 250.91            | 121.23         | 372.14      |
| Center of Milwaukee street, east from Thirty-sixth street NW ..                                                                                      | 6             | 93           | 50.36             | 39.75          | 90.11       |
| Hurst place, between Elliott place and distributing reservoir NW ..                                                                                  | 6             | 208.9        | 105.26            | 104.75         | 210.01      |
| Center of First street, between Bates and Q streets NW ..                                                                                            | 6             | 264          | 107.81            | 58.25          | 166.06      |
| East side of Fourteenth street, between G street and Georgia avenue SE; north side of Georgia avenue, between Fourteenth and Fifteenth streets SE .. | 6             | 442.5        | 189.13            | 101.43         | 290.56      |
| West side of Eighteenth street, between S street and Oregon avenue NW; intersection Eighteenth street and Oregon avenue NW ..                        | 6             | 166          | 78.98             | 71.69          | 150.67      |
| West side of Twenty-ninth street, between Q and U streets NW ..                                                                                      | 6             | 159.7        | 81.48             | 41.75          | 123.23      |
| West side of Twentieth street, between P street and Massachusetts avenue NW ..                                                                       | 6             | 120          | 53.53             | 42.37          | 95.90       |
| West side of Sixth street, from East Capitol street to E street NE ..                                                                                | 6             | 25           | 2,441.77          | 865.54         | 3,307.31    |
|                                                                                                                                                      | 12            | 2,410.2      |                   |                |             |
| West side of Tenth street, between East Capitol and I street SE ..                                                                                   | 6             | 81           | 3,954.68          | 2,633.17       | 5,587.85    |
|                                                                                                                                                      | 12            | 3,870        |                   |                |             |
| Center of Second street, from East Capitol to C streets ..                                                                                           | 12            | 1,392.4      | 1,886.41          | 902.82         | 2,789.23    |
| Lincoln avenue, from Glenwood Cemetery gate to Cincinnati street; Cincinnati street, from Lincoln avenue to Fourth street E ..                       | 12            | 2,353.4      | 1,907.44          | 643.54         | 2,550.98    |
|                                                                                                                                                      | 6             | 16           |                   |                |             |
|                                                                                                                                                      | 2             | 2            |                   |                |             |
| Connections and appurtenances ..                                                                                                                     | 4             |              | 1,275.54          | 884.03         | 2,159.57    |
|                                                                                                                                                      | 6             | 1,131.1      |                   |                |             |

TABLE III.—Statement showing cost of water mains, etc.—Continued.

| Location.                                                                            | Size.          | Length.      | Cost of material | Cost of labor. | Total cost. |
|--------------------------------------------------------------------------------------|----------------|--------------|------------------|----------------|-------------|
|                                                                                      | <i>Inches.</i> | <i>Feet.</i> |                  |                |             |
| Water mains laid, paid for by the Capital Traction Company:                          |                |              |                  |                |             |
| East side of First street, between B and C streets NE                                | 6              | 541.4        |                  |                |             |
| West side of Twenty-sixth street, between Pennsylvania avenue and I street NW        | 6              | 1,100.3      |                  |                |             |
| South side of F street, between Twenty-first and Twenty-sixth streets NW             | 6              | 2,243.9      |                  |                |             |
| North side of F street, between Seventeenth and Twenty-first streets NW              | 6              | 2,011.9      |                  |                |             |
| North side of G street, between Seventeenth and Twenty-fourth streets NW             | 6              | 2,261.6      |                  |                |             |
| North side of G street, between Twenty-fourth and Twenty-sixth streets NW            | 6              | 1,059        |                  |                |             |
| West side of Twenty-fifth street, between H street and Pennsylvania avenue NW        | 6              | 1,449.3      |                  |                |             |
| West side of Seventeenth street, from G street to Pennsylvania avenue NW             | 6              | 157.4        |                  |                |             |
| Mains laid, paid for by deposit                                                      | {              | 319          |                  |                |             |
|                                                                                      | {              | 4            |                  |                |             |
|                                                                                      | {              | 6            | 5,343.9          |                |             |
| Total cost for laying mains and connections, including repairs to improved pavements |                |              | 31,064.94        | \$15,997.70    | \$47,062.64 |
| Cost of erecting fire hydrants, including repairs to improved pavements              |                |              | 5,288.36         | 1,073.35       | 6,361.71    |
| Cost of superintendence                                                              |                |              |                  | 1,930.35       | 1,930.35    |
| Grand total                                                                          |                |              | 36,353.30        | 19,001.40      | 55,354.70   |

TABLE IV.—Statement of length and cost of water mains laid from July 1, 1878, to June 30, 1901.

| Fiscal year. | 36-inch.          | 24-inch.          | 20-inch.          | 16-inch.          | 12-inch.          | 10-inch.          | 8-inch.           |
|--------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|              | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> |
| 1878         | 40                |                   |                   |                   | 3,719             |                   |                   |
| 1879         |                   |                   |                   |                   | 7,409             |                   |                   |
| 1880         |                   |                   |                   |                   |                   |                   |                   |
| 1881         |                   |                   |                   |                   |                   |                   |                   |
| 1882         |                   |                   |                   |                   |                   |                   |                   |
| 1883         |                   |                   |                   |                   | 1,625             |                   | 26                |
| 1884         |                   |                   |                   |                   | 1,038             |                   |                   |
| 1885         |                   |                   |                   |                   | 763               |                   |                   |
| 1886         |                   |                   |                   |                   | 1,938             | 791               |                   |
| 1887         |                   |                   | 4,835             |                   | 1,124             | 2,908             |                   |
| 1888         |                   |                   |                   |                   | 731               |                   |                   |
| 1889         |                   | 2,312             | 5,140             |                   | 5,626             | 2,784             |                   |
| 1890         |                   |                   |                   |                   |                   |                   |                   |
| 1891         |                   |                   |                   |                   | 5,201             |                   |                   |
| 1892         |                   |                   | 2,926             | 2,500             | 10,163            |                   |                   |
| 1893         |                   |                   |                   |                   | 6,473             |                   |                   |
| 1894         |                   |                   | 278               |                   | 39,386            |                   |                   |
| 1895         |                   | 6,617             |                   |                   | 27,731            |                   |                   |
| 1896         |                   | 294               | 8,874             |                   | 11,873            |                   |                   |
| 1897         |                   |                   | 2,180             |                   | 6,877             |                   |                   |
| 1898         |                   |                   |                   |                   | 7,698             |                   | 907               |
| 1899         |                   |                   | 1,914             |                   | 2,220             |                   |                   |
| 1900         | 10,902            | 35                | 1,282             | 48                | 157               |                   |                   |
| 1901         |                   |                   |                   |                   | 10,026            |                   |                   |
| Total        | 10,942            | 9,258             | 27,429            | 2,548             | 151,978           | 6,573             | 933               |

TABLE IV.—Statement of length and cost of water mains, etc.—Continued.

| Fiscal year. | 6-inch.           | 4-inch.           | 3-inch.           | 2-inch.           | 1½-inch.          | Total.            | Cost.        |
|--------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------|
|              | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> | <i>Lin. feet.</i> |              |
| 1878.....    | 12,781            | 30                | .....             | .....             | .....             | 16,570            | \$14,846.20  |
| 1879.....    | 8,516             | 1,397             | .....             | .....             | .....             | 17,322            | 19,436.03    |
| 1880.....    | 3,024             | .....             | .....             | .....             | .....             | 3,024             | .....        |
| 1881.....    | 3,709             | .....             | .....             | .....             | .....             | 3,709             | 3,110.70     |
| 1882.....    | 1,920             | .....             | .....             | .....             | .....             | 1,920             | 1,626.43     |
| 1883.....    | 4,084             | .....             | .....             | .....             | .....             | 5,755             | 8,073.70     |
| 1884.....    | 8,972             | .....             | .....             | .....             | .....             | 10,010            | 10,492.51    |
| 1885.....    | 27,766            | 358               | 485               | .....             | .....             | 29,572            | 25,865.35    |
| 1886.....    | 35,192            | .....             | 6,623             | .....             | .....             | 44,544            | 40,025.10    |
| 1887.....    | 30,041            | 292               | 7,124             | .....             | .....             | 46,444            | 56,951.00    |
| 1888.....    | 9,123             | 9,148             | 3,937             | .....             | .....             | 22,969            | 17,626.63    |
| 1889.....    | 36,742            | 6,571             | 8,753             | .....             | .....             | 67,928            | 79,342.16    |
| 1890.....    | 34,737            | 2,856             | 2,855             | .....             | .....             | 40,448            | 19,113.54    |
| 1891.....    | 56,893            | 3,142             | 11,013            | .....             | .....             | 76,249            | 49,762.65    |
| 1892.....    | 88,700            | 3,342             | 1,286             | .....             | .....             | 108,926           | 74,733.04    |
| 1893.....    | 54,173            | 8,336             | 3,458             | .....             | .....             | 72,440            | 56,330.39    |
| 1894.....    | 86,682            | 12,832            | 2,918             | .....             | .....             | 142,046           | 126,399.55   |
| 1895.....    | 103,785           | 5,442             | 2,733             | .....             | .....             | 116,308           | 131,342.31   |
| 1896.....    | 61,464            | 1,738             | 3,262             | .....             | .....             | 87,505            | 89,385.12    |
| 1897.....    | 71,266            | 10,595            | 962               | .....             | 2,104             | 94,014            | 77,951.81    |
| 1898.....    | 52,371            | 6,735             | 2,790             | 1,633             | 500               | 72,634            | 48,661.70    |
| 1899.....    | 84,291            | 4,662             | 2,701             | 79                | 133               | 96,000            | 65,774.32    |
| 1900.....    | 53,838            | 4,211             | 2,116             | 17                | 433               | 73,659            | 114,784.72   |
| 1901.....    | 52,018            | 2,187             | 935               | .....             | 646               | 65,271            | 47,426.71    |
| Total.....   | 982,047           | 83,874            | 63,981            | 1,720             | 3,836             | 1,344,587         | 1,182,383.87 |

TABLE V.—Average cost per foot for laying mains of various sizes, excluding repairs to improved pavements, during the fiscal year ending June 30, 1901.

| Size.        | Linear feet. | Cost of material. | Cost of labor. | Cost of superintendence. | Total.  |
|--------------|--------------|-------------------|----------------|--------------------------|---------|
| 3-inch.....  | 616          | \$0.322           | \$0.239        | \$0.0257                 | \$0.586 |
| 4-inch.....  | 1,529        | .401              | .268           | .0399                    | .689    |
| 6-inch.....  | 34,639       | .536              | .275           | .0370                    | .848    |
| 12-inch..... | 10,026       | .925              | .357           | .0584                    | 1.340   |

TABLE VI.—Statement of length and cost of water mains laid for the extension of the high-service system of water distribution from July 1, 1893, to June 30, 1901.

| Size of main. | Laid to June 30, 1900. | Laid during year ending June 30, 1901. | Total.  |
|---------------|------------------------|----------------------------------------|---------|
| 1½-inch.....  | 2,717                  | .....                                  | 2,717   |
| 2-inch.....   | 1,095                  | .....                                  | 1,095   |
| 3-inch.....   | 1,808                  | .....                                  | 1,808   |
| 4-inch.....   | 4,722                  | 695                                    | 5,417   |
| 6-inch.....   | 144,293                | 18,511                                 | 162,804 |
| 12-inch.....  | 81,672                 | 2,353                                  | 84,025  |
| 16-inch.....  | 48                     | .....                                  | 48      |
| 20-inch.....  | 14,529                 | .....                                  | 14,529  |
| 24-inch.....  | 6,946                  | .....                                  | 6,946   |
| 36-inch.....  | 10,902                 | .....                                  | 10,902  |
| Total.....    | 268,732                | 21,559                                 | 290,291 |

Total cost to June 30, 1900.....\$339,967.34  
 Total cost for fiscal year ending June 30, 1901.....17,245.10

Aggregate cost to June 30, 1901.....357,212.44

TABLE VII.—Daily average consumption, middle and high services.

| Month.         | Middle.   | High.   | Month.        | Middle.   | High.   |
|----------------|-----------|---------|---------------|-----------|---------|
| 1900.          |           |         | 1901.         |           |         |
| July.....      | 7,265,107 | 419,380 | January.....  | 7,640,256 | 248,720 |
| August.....    | 7,482,960 | 443,150 | February..... | 7,508,400 | 240,777 |
| September..... | 7,345,222 | 420,074 | March.....    | 7,332,492 | 218,520 |
| October.....   | 7,137,397 | 404,230 | April.....    | 7,344,010 | 212,628 |
| November.....  | 7,233,548 | 362,117 | May.....      | 7,629,841 | 258,261 |
| December.....  | 7,711,466 | 390,312 | June.....     | 8,041,695 | 340,700 |

TABLE VIII.—Statement of the number of shallow and deep wells.

|                                                                       | Shallow wells. | Deep wells. | Total. |
|-----------------------------------------------------------------------|----------------|-------------|--------|
| In service June 30, 1900 .....                                        | 67             | 40          | 107    |
| Closed and discontinued during fiscal year ending June 30, 1901 ..... | 5              | -----       | 5      |
| In service June 30, 1901.....                                         | 62             | 40          | 102    |

*Proposals for earth excavation of foundation of new pumping station, opened January 26, 1901.*

| Name of bidder.     | Price per cubic yard (estimated quantity, 15,000 yards). |
|---------------------|----------------------------------------------------------|
| Lewis Hatton.....   | \$0.31 $\frac{1}{2}$                                     |
| E. G. Gummel.....   | .34                                                      |
| Andrew Gleeson..... | .38 $\frac{1}{2}$                                        |

All bids rejected.

*Proposals for furnishing curb and corporation cocks, opened February 2, 1901.*

| Name of bidder.                             | Curb cocks.                                      |                                   |                                                  |
|---------------------------------------------|--------------------------------------------------|-----------------------------------|--------------------------------------------------|
|                                             | $\frac{3}{4}$ -inch (estimated quantity, 1,100). | 1-inch (estimated quantity, 250). | 1 $\frac{1}{2}$ -inch (estimated quantity, 150). |
| A. P. Smith Manufacturing Co.: <sup>1</sup> |                                                  |                                   |                                                  |
| Inverted.....                               | \$1.30                                           | \$2.00                            | \$3.00                                           |
| Direct.....                                 | .75                                              | 1.35                              | 2.00                                             |
| H. Mueller Manufacturing Co.:               |                                                  |                                   |                                                  |
| Inverted.....                               | 1.22                                             | 2.14                              | 3.41                                             |
| Direct.....                                 | .75                                              | 1.32                              | 2.10                                             |
| C. J. McCubbin Co.:                         |                                                  |                                   |                                                  |
| Inverted.....                               | 1.08                                             | 1.90                              | 3.00                                             |

<sup>1</sup> Contract awarded.

| Name of bidder                                 | Corporation cocks.                  |                                     |                                     |                          |                                      |                                      |
|------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------------------|--------------------------------------|
|                                                | $\frac{3}{4}$ inch (quantity, 900). | $\frac{1}{2}$ inch (quantity, 350). | $\frac{1}{4}$ inch (quantity, 100). | 1 inch. (quantity, 100). | 1 $\frac{1}{2}$ inch (quantity, 50). | 1 $\frac{3}{4}$ inch (quantity, 50). |
| A. P. Smith Manufacturing Company <sup>1</sup> | \$0.75                              | \$1.00                              | \$1.20                              | \$1.75                   | \$3.00                               | \$4.00                               |
| H. Mueller Manufacturing Company..             | .77 $\frac{1}{2}$                   | .97                                 | 1.34                                | 1.89                     | 3.71                                 | 4.77                                 |

<sup>1</sup> Contract awarded.

*Proposals for constructing two gate houses at the Brightwood reservoir, opened May 4, 1901.*

| Name of bidder.              | Marble.  | Granite. | Terra cotta. | Brick.   | Columbian marble. | Blue marble. | Indiana lime-stone. |
|------------------------------|----------|----------|--------------|----------|-------------------|--------------|---------------------|
| Antonio Malnati.....         | \$28,606 | \$21,168 | \$12,843     | \$12,392 | -----             | -----        | -----               |
| D. J. Mockabee.....          | 21,389   | 19,922   | 11,510       | 13,240   | -----             | -----        | -----               |
| Sam'l. J. Prescott & Co..... | 22,581   | 17,741   | 10,983       | 10,883   | -----             | -----        | -----               |
| Wm. A. Kimmel.....           | 17,000   | 16,053   | 10,729       | 10,979   | \$21,819          | \$16,555     | \$14,500            |

<sup>1</sup> Contract awarded.

# 106 OPERATIONS OF THE ENGINEER DEPARTMENT, D. C.

*Proposals for erecting iron fence and gates at Brightwood reservoir, opened May 25, 1901.*

[Estimated quantity, 2,250 linear feet.]

|                                           |        |
|-------------------------------------------|--------|
| Charles White & Co.....                   | \$2.26 |
| Fred J. White.....                        | 1.92   |
| C. A. Schneider's Sons <sup>1</sup> ..... | 1.50   |
| A. F. Jorss <sup>2</sup> .....            | 1.50   |

<sup>1</sup> Contract awarded.

<sup>2</sup> Bid informal.

*Proposals for earth excavation for foundation of new pumping station, opened June 29, 1901.*

[Estimated quantity, 15,000 cubic yards.]

| Name of bidder.                   | Price per cubic yard. |
|-----------------------------------|-----------------------|
| Andrew Gleeson <sup>1</sup> ..... | \$0.24                |
| Carmony & Hough.....              | .28                   |
| John H. Hammersly.....            | .50                   |

<sup>1</sup> Contract awarded.

*Number of assistant engineers, clerks, inspectors, foremen, and other employees (exclusive of day laborers) in the employ of the water department of the District of Columbia, and the appropriation from which paid, for the fiscal year ending June 30, 1901.*

| Designations.                       | Num-ber. | Per diem. | Appropriation from which paid.           |                                             |                                | Total.     |
|-------------------------------------|----------|-----------|------------------------------------------|---------------------------------------------|--------------------------------|------------|
|                                     |          |           | Pumping expenses and pipe distribu-tion. | High-serv-ice sys-tem, water distribu-tion. | Purchase and re-pair of pumps. |            |
| Assistant engineer.....             | 1        | \$5.00    |                                          | \$1,500.00                                  |                                | \$1,500.00 |
| Superintendent of construction..... | 1        | 4.25      | \$1,551.25                               |                                             |                                | 1,551.25   |
| Inspector.....                      | 1        | 5.00      |                                          | 1,400.00                                    |                                | 1,400.00   |
| Do.....                             | 1        | 4.50      | 517.50                                   | 468.00                                      |                                | 985.50     |
| Inspectors.....                     | 2        | 2.00      | 150.00                                   | 704.25                                      |                                | 860.25     |
| Do.....                             | 9        | 2.50      | 1,585.00                                 | 2,733.75                                    |                                | 4,318.75   |
| Clerk.....                          | 1        | 4.50      | 1,309.50                                 |                                             |                                | 1,309.50   |
| Do.....                             | 1        | 4.00      | 612.00                                   | 628.00                                      |                                | 1,240.00   |
| Instrument man.....                 | 1        | 3.50      |                                          | 682.50                                      |                                | 682.50     |
| Rodman.....                         | 1        | 3.00      |                                          | 342.00                                      |                                | 342.00     |
| Do.....                             | 1        | 2.50      |                                          | 482.50                                      |                                | 482.50     |
| Chainmen.....                       | 2        | 2.25      |                                          | 585.00                                      |                                | 585.00     |
| Draftsman.....                      | 1        | 3.00      |                                          | 933.00                                      |                                | 933.00     |
| Assistant foreman.....              | 1        | 3.50      | 1,090.25                                 |                                             |                                | 1,090.25   |
| Do.....                             | 1        | 3.00      |                                          |                                             | \$844.50                       | 844.50     |
| Assistant foremen.....              | 3        | 2.50      |                                          | 88.13                                       | 50.00                          | 138.13     |
| Machinist.....                      | 1        | 4.00      | 1,203.00                                 |                                             |                                | 1,203.00   |
| Assistant machinists.....           | 2        | 3.00      | 1,696.75                                 |                                             |                                | 1,696.75   |
| Plumbers.....                       | 2        | 3.50      | 1,905.00                                 |                                             |                                | 1,905.00   |
| Plumber.....                        | 1        | 3.00      | 801.00                                   |                                             |                                | 801.00     |
| Storekeeper.....                    | 1        | 3.00      | 861.00                                   |                                             |                                | 861.00     |
| Carpenter.....                      | 1        | 3.00      | 659.25                                   |                                             |                                | 659.25     |
| Blacksmith.....                     | 1        | 3.00      | 123.00                                   |                                             |                                | 123.00     |
| Do.....                             | 1        | 2.75      | 717.06                                   |                                             |                                | 717.06     |
| Assistant tapper.....               | 1        | 2.50      | 768.75                                   |                                             |                                | 768.75     |
| Steam engineers.....                | 3        | 2.50      | 1,628.13                                 |                                             |                                | 1,628.13   |
| Steam engineer.....                 | 1        | 2.00      | 472.00                                   |                                             |                                | 472.00     |
| Firemen.....                        | 3        | 2.50      | 2,565.62                                 |                                             |                                | 2,565.62   |
| Do.....                             | 2        | 2.00      | 1,174.00                                 |                                             |                                | 1,174.00   |
| Watchman.....                       | 1        | 2.50      |                                          | 888.75                                      |                                | 888.75     |
| Messengers.....                     | 2        | 1.75      | 1,218.87                                 |                                             |                                | 1,218.87   |
| Drivers.....                        | 4        | 1.75      | 785.75                                   | 598.50                                      |                                | 1,384.25   |
| Driver.....                         | 1        | 1.50      | 69.00                                    |                                             |                                | 69.00      |
| Total.....                          | 56       |           | 23,730.68                                | 12,154.38                                   | 894.50                         | 36,785.56  |



## REPORT OF THE WATER REGISTRAR.

WASHINGTON, July 29, 1901.

CAPTAIN: I have the honor to submit the following report of the operations of the revenue and inspection branch of the water department for the year ending June 30, 1901:

|                                          |         |
|------------------------------------------|---------|
| Inspections made                         | 111,299 |
| Premises in which leaks were found       | 9,747   |
| Water-rent bills delivered by inspectors | 33,758  |
| Water-main assessment notices served     | 1,223   |
| Tax certificates examined                | 6,021   |
| Taps issued                              | 1,398   |
| Stopcocks issued                         | 1,381   |
| Permits examined                         | 2,558   |

During the fiscal year just closed a remeasurement and reexamination of all the houses in the District of Columbia supplied with Potomac water was commenced, and has been pushed steadily forward, so that at the present time the rerating is about two-thirds completed, and it is safe to estimate that the expense of this labor will be many times repaid by the large increase in revenue from premises heretofore underrated.

In November last the water-main tax branch of this department was transferred to the office of the assessor, and with it one of the clerks of this office, reducing the number to three, who are even when business is at its lightest, unable to cope with the ever-increasing volume, thus necessitating the detail of inspectors to clerical work and reducing another force already far too small to cover a rapidly growing territory. For this reason I again invite attention to the request in my last annual estimates and this year's for an increase of two in the clerical and a like number in the inspection branch of this bureau.

An increase in the salary of one of the fourteen-hundred-dollar employees to sixteen hundred was urged in my last report. It is hoped that this advance will be procured, the same being for the clerk detailed as acting chief clerk, whose duties and responsibilities warrant the augmentation asked.

Five tables are herewith submitted.

Very respectfully,

GEO. F. GREEN,  
Water Registrar.

Capt. LANSING H. BEACH,  
Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.  
(Through Captain Harding.)

TABLE I.—Financial statement from July 1, 1900, to June 30, 1901.

|                                                                                |              |
|--------------------------------------------------------------------------------|--------------|
| Revenues:                                                                      |              |
| Balance to credit of water fund July 1, 1900 (as shown by the auditor's books) | \$308,487.00 |
| Schedule water rents                                                           | \$248,518.38 |
| Meter water rents                                                              | 55,038.81    |
|                                                                                | \$303,557.19 |
| Water-main tax                                                                 | 57,336.65    |
| Less abatement at 6 per cent.                                                  | 976.93       |
|                                                                                | 56,359.72    |
| Water taps and stopcocks                                                       | 6,140.85     |
| Permits for building purposes                                                  | 1,340.99     |
| Miscellaneous                                                                  | 647.87       |
| Water-service connections                                                      | 1,075.53     |
|                                                                                | 369,122.15   |
| Total                                                                          | 678,609.15   |
| Expenditures:                                                                  |              |
| Salaries                                                                       | 29,958.49    |
| Contingent expenses                                                            | 2,157.16     |
| Refunds                                                                        | 1,040.69     |
| Pumping expense and pipe distribution                                          | 128,208.87   |
| Extension of the high service                                                  | 176,648.47   |
| Purchase of water meters                                                       | 55.00        |
| Interest on bonds                                                              | 6,022.00     |
| Introduction of card system                                                    | 1,378.18     |
|                                                                                | 345,468.86   |
| Less repayments                                                                | 53,781.78    |
|                                                                                | 291,687.08   |
| Balance to the credit of water fund July 1, 1901                               | 386,922.07   |

TABLE II.—Comparative statement of revenues.

| Fiscal year.            | Water rents. | Water-main assessments. | Taps and stopcocks. | Permits, etc. | Total revenues. |
|-------------------------|--------------|-------------------------|---------------------|---------------|-----------------|
| 1890.....               | \$197,053.34 | \$45,386.55             | \$5,313.72          | \$6,327.95    | \$254,081.56    |
| 1891.....               | 209,664.29   | 50,332.93               | 5,640.00            | 6,869.79      | 272,497.01      |
| 1892.....               | 220,892.93   | 68,807.35               | 5,790.00            | 6,280.81      | 301,771.09      |
| 1893.....               | 235,911.25   | 70,026.33               | 7,307.09            | 7,931.71      | 321,176.38      |
| 1894.....               | 245,869.69   | 86,975.44               | 4,497.00            | 1,168.79      | 338,540.92      |
| 1895.....               | 251,872.71   | 72,972.24               | 4,537.55            | 2,100.60      | 331,483.10      |
| 1896.....               | 255,439.11   | 27,696.57               | 4,026.00            | 1,191.06      | 288,353.77      |
| 1897.....               | 253,500.16   | 53,653.39               | 5,157.00            | 1,128.28      | 313,438.83      |
| 1898.....               | 264,784.48   | 58,152.56               | 6,910.65            | 1,104.42      | 330,952.11      |
| 1899.....               | 276,045.54   | 62,937.43               | 6,327.00            | 1,545.15      | 346,855.12      |
| 1900.....               | 286,257.63   | 53,420.70               | 5,208.15            | 4,452.53      | 349,339.01      |
| 1901.....               | 303,557.19   | 56,359.72               | 6,140.85            | 3,064.39      | 369,122.15      |
| 1902 <sup>1</sup> ..... | 315,000.00   | 60,000.00               | 7,000.00            | 2,000.00      | 384,000.00      |
| 1903 <sup>1</sup> ..... | 325,000.00   | 60,000.00               | 7,000.00            | 2,000.00      | 394,000.00      |

<sup>1</sup> Estimated.

TABLE III.—Statement of assessments and collections of water-main taxes from July 1, 1878, to June 30, 1901.

| Fiscal year.                             | Amount of water-main tax assessed. | Duplicate and over payments. | 6 per cent abatement. | Amount of water-main tax canceled. | Amount of water-main tax collected. | Amount of water-main tax outstanding. |
|------------------------------------------|------------------------------------|------------------------------|-----------------------|------------------------------------|-------------------------------------|---------------------------------------|
| From July 1, 1878, to June 30, 1900..... | \$1,259,023.46                     | \$2,104.45                   | \$28,845.92           | \$218,744.80                       | \$879,610.22                        | \$133,926.95                          |
| 1901.....                                | 38,798.74                          | .....                        | 976.93                | 1,822.90                           | 56,359.72                           | 220,399.81                            |
| Total.....                               | 1,297,822.20                       | 2,104.45                     | 29,822.85             | 220,567.70                         | 935,969.94                          | 113,566.16                            |

<sup>1</sup> Of this amount, \$94,124.78 was outstanding and uncollected July 1, 1878.<sup>2</sup> This amount is the excess of the amounts collected, canceled, and abated over the tax levied.

## RECAPITULATION.

|                                                                             |                |
|-----------------------------------------------------------------------------|----------------|
| Amount of assessments and duplicate payments.....                           | \$1,269,926.65 |
| Amount of abatement at 6 per cent.....                                      | 29,822.85      |
| Amount of water-main tax canceled since July 1, 1878.....                   | 220,567.70     |
| Amount of water-main tax collected from July 1, 1878, to June 30, 1901..... | 935,969.94     |
| Amount of water-main tax outstanding July 1, 1901.....                      | 113,566.16     |
|                                                                             | 1,269,926.65   |

TABLE IV.—Premises in the District of Columbia supplied with Potomac water.

| Number of dwellings—           | North-west. | Northeast. | South-west. | Southeast. | Total. |
|--------------------------------|-------------|------------|-------------|------------|--------|
| To June 30, 1900.....          | 26,298      | 5,050      | 7,761       | 6,065      | 45,204 |
| Year ending June 30, 1901..... | 664         | 237        | 147         | 223        | 1,271  |
| Total.....                     | 26,962      | 5,287      | 7,908       | 6,318      | 46,475 |

TABLE IV.—*Premises in the District of Columbia supplied with Potomac water—Continued.*

MISCELLANEOUS WATER TAKERS (UNMETERED).

|                                  | North-west. | Northeast. | South-west. | Southeast. | Total. |
|----------------------------------|-------------|------------|-------------|------------|--------|
| Asylums .....                    | 5           |            |             |            | 5      |
| Apartment houses .....           | 10          | 5          | 1           | 1          | 17     |
| Bakeries .....                   | 21          | 6          | 5           | 9          | 41     |
| Barber shops .....               | 105         | 31         | 19          | 19         | 174    |
| Banks .....                      | 1           |            | 1           | 1          | 3      |
| Barrooms .....                   | 226         | 79         | 15          | 32         | 352    |
| Boarding houses .....            | 260         | 13         | 16          | 17         | 306    |
| Bottling depots .....            | 5           |            |             |            | 5      |
| Boathouses .....                 | 4           |            |             |            | 4      |
| Churches .....                   | 45          | 14         | 10          | 10         | 79     |
| Clubhouses .....                 | 8           |            | 1           | 1          | 10     |
| Dining rooms .....               | 64          | 7          | 1           | 3          | 75     |
| District buildings, etc .....    | 77          | 13         | 17          | 17         | 124    |
| Dyehouses .....                  | 3           |            |             |            | 3      |
| Dairies .....                    | 15          | 2          | 3           |            | 20     |
| Factories .....                  | 6           |            | 1           |            | 7      |
| Gas engines .....                | 3           |            |             |            | 3      |
| United States reservations ..... | 47          | 8          | 3           | 7          | 65     |
| Greenhouses .....                | 10          |            | 1           | 1          | 12     |
| Halls .....                      | 18          | 5          | 1           | 3          | 27     |
| Hospitals .....                  | 6           |            |             | 1          | 7      |
| Laundries .....                  | 80          | 16         | 17          | 21         | 134    |
| Offices .....                    | 184         | 10         | 20          | 16         | 230    |
| Photograph galleries .....       | 12          | 1          | 1           | 1          | 15     |
| Stables .....                    | 641         | 114        | 170         | 102        | 1,027  |
| Stores .....                     | 1,465       | 336        | 225         | 250        | 2,276  |
| Shops .....                      | 162         | 9          | 14          | 14         | 199    |
| Steam engines .....              | 6           |            |             |            | 6      |
| Private schools .....            | 14          | 1          | 1           | 1          | 17     |
| Stone yards .....                | 4           |            |             |            | 4      |
| Warehouses .....                 | 26          | 6          | 6           | 1          | 39     |
| Wood and coal yards .....        | 6           | 1          | 1           |            | 8      |
| Total .....                      | 3,539       | 677        | 549         | 529        | 5,294  |

TABLE V.—*Water meters.*

|                      | $\frac{1}{4}$ -in. | $\frac{1}{2}$ -in. | $\frac{3}{4}$ -in. | 1-in. | 1 $\frac{1}{2}$ -in. | 2-in. | 3-in. | 4-in. | 6-in. | Registers. | Total. |
|----------------------|--------------------|--------------------|--------------------|-------|----------------------|-------|-------|-------|-------|------------|--------|
| Worthington .....    | 4                  | 3                  | 3                  | 13    | 14                   | 23    | 16    | 4     |       |            | 73     |
| Thomson .....        | 4                  | 3                  | 108                | 33    | 59                   | 34    | 5     | 3     | 1     |            | 310    |
| Crown .....          | 1                  | 9                  | 29                 | 27    | 30                   | 18    | 11    | 1     | 4     |            | 101    |
| Nash .....           | 6                  | 3                  | 149                | 187   | 112                  | 53    | 13    | 7     | 2     |            | 532    |
| Union .....          |                    | 1                  | 39                 | 46    | 11                   | 11    | 1     | 1     |       |            | 110    |
| Niagara .....        |                    |                    |                    | 3     | 1                    | 1     |       |       |       |            | 5      |
| Lambert .....        |                    |                    | 27                 | 5     | 9                    | 5     |       | 1     | 1     |            | 48     |
| Gem .....            |                    |                    |                    |       |                      | 4     | 5     | 1     | 1     |            | 11     |
| Hersey Disk .....    |                    | 1                  | 1                  | 1     | 4                    | 4     |       |       |       |            | 11     |
| Trident .....        |                    |                    |                    |       | 2                    |       |       |       |       |            | 2      |
| Pittsburg Disk ..... |                    | 1                  |                    | 9     | 4                    | 6     | 12    |       |       |            | 32     |
| Registers .....      |                    |                    |                    |       |                      |       |       |       |       | 5          | 5      |
| Total .....          | 11                 | 9                  | 336                | 384   | 246                  | 159   | 63    | 18    | 9     | 5          | 1,240  |

## REPORT OF THE SUPERINTENDENT OF SEWERS.

WASHINGTON, D. C., September 14, 1901.

CAPTAIN: I have the honor to submit the following report of the operations of the sewer division for the fiscal year ending June 30, 1901:

Under the appropriation for cleaning and repairing sewers and basins the following-described work was performed:

*Sewers and appurtenances cleaned and repaired.*

## Cleaned:

|                                          |             |         |
|------------------------------------------|-------------|---------|
| Pipe sewers .....                        | feet        | 122,900 |
| Main sewers .....                        | do          | 12,069  |
| Manholes .....                           |             | 13,535  |
| Catch basins .....                       |             | 118,845 |
| Gravel basins .....                      |             | 42      |
| Basin outlets .....                      |             | 79      |
| Street detritus and sludge removed ..... | cubic yards | 11,723  |

## Repaired:

|                                                      |      |       |
|------------------------------------------------------|------|-------|
| Pipe sewers constructed .....                        | feet | 249   |
| Pipe sewers taken up and relaid .....                | do   | 1,294 |
| Main sewers repaired .....                           | do   | 1,284 |
| Basins constructed .....                             |      | 17    |
| Basins reconstructed .....                           |      | 23    |
| Basins repaired .....                                |      | 162   |
| Flushing basins repaired .....                       |      | 32    |
| Basin tops replaced (artificial and bluestone) ..... |      | 53    |
| Covers (cast iron) replaced .....                    |      | 103   |
| Basins abandoned .....                               |      | 8     |
| Manholes constructed .....                           |      | 16    |
| Manholes reconstructed .....                         |      | 28    |
| Manholes adjusted to grade .....                     |      | 120   |
| Manholes repaired .....                              |      | 585   |
| Manhole frames and covers replaced .....             |      | 87    |
| Manhole covers replaced .....                        |      | 117   |
| Manholes abandoned .....                             |      | 13    |
| Alley grates and frames replaced .....               |      | 55    |
| Alley grates replaced .....                          |      | 21    |
| Alley basins repaired .....                          |      | 31    |
| Total number of minor repairs .....                  |      | 585   |
| Total number of jobs of all kinds performed .....    |      | 1,479 |

A section (288.14 linear feet) of new invert was constructed in the North Capitol street sewer between G and H streets; 50 artificial basin tops were constructed; the outlets of Anacostia main sewers were cleaned.

|                                                     |             |
|-----------------------------------------------------|-------------|
| Amount expended for cleaning catch basins .....     | \$11,861.65 |
| Amount expended for manual flushing of sewers ..... | 5,701.64    |

The flushing gates at the outlet end of Tiber sewer were operated throughout the year, with advantage to the sewer.

The large number of boats in the canal prevents the improvement of its condition, which would otherwise result from the operations of the flushing gates.

The tidal sewers and sediment chambers were cleaned, as required.

Two flushing gangs were employed throughout the year flushing pipe sewers.

Under the appropriation for "Replacing obstructed sewers" the sewers in Fourteenth street NW., between R and S streets, aggregating 872 feet, were replaced under contract. There were constructed by day labor 5,351 feet of pipe sewers, varying in size from 10 to 18 inches in diameter, 744 feet of 6-inch lateral connections, and 33 manholes.

One hundred and fourteen house connections were made in connection with this work.

## MAIN AND PIPE SEWERS.

The sewer in First street NE., between D and F streets, under contract with Adam McCandlish (contract 2744), was completed and charged to the appropriation for main pipe sewers, 1900.

Sewers were constructed under contracts: In Potomac Park between Twenty-sixth street and the Potomac River, and in Twenty-sixth street between Water and D streets; in Nineteenth street NW. between Q and R streets; in S street NW.

between Fourteenth and Fifteenth streets; in Eighteenth street NW. between Q and Corcoran, and in New Hampshire avenue between Corcoran and Riggs streets.

The main sewer in Sixteenth street NW. between K and L streets and in K street between Fifteenth and Sixteenth street; was begun by Contractor Adam McCandlish under contract 2841, but was not completed.

There were constructed by day labor 7,026 linear feet of pipe sewers, varying in size from 6 to 24 inches in diameter (44 manholes), divided among 39 jobs, the average length per job being 180.15 linear feet, and the average cost per job being \$80.29. There were also constructed 157 catch basins; 4,208 linear feet connections, varying in size from 6 to 24 inches in diameter; 11 manholes, and 39 linear feet gutter inlet, divided among 124 jobs, the average length of connection per job being 33.9 linear feet, and the average cost per basin job being \$100.297.

#### SUBURBAN SEWERS.

Main sewers were constructed under contracts in U street NW. between First street and North Capitol streets; in Brandywine street between Seventh and Fifth streets, and in Fifth street between Brandywine and Des Moines streets; in T street between North Capitol and First streets, charged to the appropriation for suburban sewers, 1900.

The sewer in the valley of Piney Branch, between Fifth and Chesapeake and Piney Branch road and Vermilion streets, was constructed under contract.

There were constructed by day labor 5,714 linear feet pipe sewers, varying in size from 8 to 24 inches in diameter (57 manholes), divided among 26 jobs, the average length per job being 219.77 linear feet, and the average cost per job being \$351.34.

#### ASSESSMENT AND PERMIT WORK.

*Permit work.*—There were constructed by day labor 8,038 linear feet pipe sewer, varying in size from 8 to 21 inches in diameter (57 manholes), divided among 59 jobs, the average length per job being 136.24 linear feet, the average cost per job being \$195.20, and the average cost per foot being \$1.433.

*Assessment system.*—There were constructed by day labor 21,298.4 linear feet pipesewers, varying in size from 8 to 18 inches in diameter (92 manholes), divided among 74 jobs, the average length per job being 287.81 linear feet, the average cost per job being \$403.39, and the average cost per foot being \$1.383.

#### AUTOMATIC FLUSHING TANKS.

Six flushing basins in various locations were constructed from the appropriation for automatic flushing tanks.

#### TIBER CREEK AND NEW JERSEY AVENUE HIGH-LEVEL INTERCEPTING SEWER.

Work under contract 2446, with J. K. Murphy, was completed: 866.3 linear feet main sewer were constructed.

#### EXTENSION OF BOUNDARY SEWER.

There were constructed 101 linear feet invert for sewer 22 feet in diameter under contract 2889 with John Jacoby.

#### EAST SIDE INTERCEPTING SEWER.

There were constructed 1,749 linear feet of 6.25-foot-diameter sewer in the section between Twelfth street SE. and pumping station, and 1,229 linear feet of 6.25-foot-diameter sewer and 359 linear feet of 6-foot-diameter sewer in the section between Twenty-second and A streets NE. and Twelfth street SE., under contract 2743, with John Jacoby. Work is still in progress on both sections.

#### ARIZONA AVENUE SEWER.

There were constructed 1,061.6 linear feet 9-foot-diameter sewer and 754.4 linear feet invert for sewer 9 feet in diameter, being equivalent to 1,438.8 linear feet 9-foot-diameter sewer completed, 126 linear feet of 8.75-foot-diameter sewer and 855 linear feet invert for 8.75-foot-diameter sewer, being equivalent to 554 linear feet 8.75-foot-diameter sewer completed, under contract 2837, with Warren F. Brenizer. Work is still in progress on this sewer.

There were constructed by day labor 152.6 linear feet 6.75-foot diameter sewer.

## L STREET SEWER.

There were constructed 1,805 linear feet main sewer and 15 linear feet bell section under contract 2870 with Peyton D. Vinson. Work is still in progress on this sewer.

Under the appropriation for the "Preparation of detailed plans and specifications for sewage disposal complete" the following work was performed:

(1) *B street and New Jersey avenue trunk sewer.*—Surveys for this sewer along the various lines, including detail surveys of portions of the Mall, and borings have been completed; sizes determined, sections designed, and plans, profiles, and estimates prepared. The various detail sheets of connections, chambers, gates and regulators, and specifications are now being prepared.

(2) *Low-area trunk sewer.*—Surveys, including borings, have been completed and plan, profile, and estimates prepared. Tracings, estimates, and specifications for the first section have been prepared for contract. The details of connections at the sewerage pumping station are now being designed.

(3) *Water and L street intercepting sewer.*—Surveys, including borings and studies, for this sewer via L and M streets have been made, and the L-street location is recommended for adoption as the more desirable; also surveys and borings for branch lines except the branch south in Canal street and the branch in Water street. Sizes have been determined, sections designed, and plans, profiles, and estimates prepared. Detail sheets of sections, connections, gates and regulators, and specifications are now being prepared.

(4) *Four-and-a-half street high-level intercepting sewer.*—Surveys for this sewer, including its extension along B street south to Twelfth street west, and including surveys for the proposed Twelfth street southwest trunk sewer, have been made. Plans, profiles, and estimates have been prepared for these lines and for the alternative constructions involved, a study of which indicates the undesirability of the Twelfth street trunk sewer construction, and it is recommended that this project be abandoned. Detail sheets of outlet section, tide gates, connections, and sections are now in course of preparation. Estimate of cost, required sizes, grades, and plan of the extension of this sewer along B street south from Sixth to Twelfth street have been furnished (#31851 E. D. 1900).

(5) *Rock Creek and B street intercepting sewer.*—Surveys for the completion of this sewer, from Virginia avenue and B street to Twenty-first and Water streets, including borings, have been completed, and plan, profile, and estimate prepared. Designs and detail plans for gates at Virginia avenue and at G street, and for regulator at the crossing of the Easby Point and F street intercepting sewer, are yet to be prepared.

(6) *Outlet section Tiber Creek and New Jersey avenue high-level intercepting sewer.*—This outlet section has been designed, and plan, profile, detail drawings, and specifications prepared for contract. The construction has been commenced under contract No. 2893.

(7) *Temporary sewage pumping station.*—Plans and specifications for the pumping plant for this section have been prepared for contract. Its construction, under contract No. 2897, with the Camden Iron Works, is now under way. The pump well, suction conduit, and screen well have been designed and partly constructed under contract No. 2893.

(8) *Sewage disposal pumping station.*—General plans and the specifications for the pumps and machinery have been prepared for contract. The detail plans of sediment chamber, conduits, and gates are now being prepared.

(9) *Siphons under Anacostia River.*—Surveys and borings for the crossing of the Anacostia River have been made both on the line laid down by the sewerage commission and on a line about normal to the proposed channel lines for the river. The latter involving the extension of the outfall sewer on pile foundation, to the established bulkhead line, will reduce the length of the siphon line from 2,640 feet to 1,428 feet, and is recommended. Plans have been made for this line. Detail sheets of sections, chambers, etc., and estimates are now being prepared.

(10) *Outfall sewer.*—Surveys for this sewer, including a large amount of detail topography, especially over the more rugged portions of the line, and borings have been made. The topography has been mapped, the map location made, and the lines and profiles run. In addition, surveys of intersecting streams and drainage have been made and plans for by-passing the streams and drainage worked out, and detail sheets and estimates therefor prepared.

(11) *Outlet section at Magazine Point.*—Surveys of the shore and channel in the vicinity of Magazine Point have been made and mapped, and the location of the outlet section made.

Plan, profile, and detail sheets are now being prepared.

Upon the subject of the construction of service sewers, I respectfully reiterate my recommendation contained in the annual report for the fiscal year 1898: "I respectfully invite attention to an absence of equity in the construction of service sewers. In consideration of the fact that the larger sewers are larger and more expensive because they are required as outlets for smaller sewers, it has seemed unfair that they should be charged against the abutting property, and the practice of the office is to construct sewers of greater size than 12 inches in diameter from the appropriation for main and pipe sewers or the appropriation for suburban sewers. Sewers 12 inches and under in diameter are usually constructed under the assessment system, in which case one half of the cost is taxed against the abutting property. According to this practice, property abutting upon sewers above 12 inches in diameter is not taxed on account of the sewer construction, although it receives as much benefit as property which is taxed for the construction of sewers under the assessment system. Again, under the assessment system the owner of the corner lot is, in many instances, compelled to pay as much as five times the amount assessed against the adjacent lot of equal area, each receiving equal benefit. In my opinion all properties abutting upon a service sewer should pay a proportion of its cost, and assuming the average cost of 12-inch sewers as a foundation, \$7.50 for each 1,000 feet of lot area would place the charge upon a fair basis."

I would respectfully suggest that it would be a great help to the work of the office if the construction appropriations were so made that they would be available until expended instead of lapsing with the fiscal year. There is no apparent advantage in the present arrangement, and many disadvantages. I also suggest that an effort be made to raise the limit of expenditure permissible by day labor from \$1,000 to \$3,000. This is especially desirable for emergency and repair work.

## TABLES.

Table 1 shows work performed under contract.

Table 2 shows work performed under the permit system (voluntary system).

Table 3 shows work performed under the assessment system.

Table 4 shows work performed at whole cost to the applicant.

Table 5 shows work performed by day labor chargeable to the appropriation for replacing obstructed sewers.

Table 6 shows work performed by day labor chargeable to the appropriation for main and pipe sewers.

Table 7 shows work performed by day labor chargeable to the appropriation for suburban sewers.

Table 8 shows work performed by day labor chargeable to various appropriations (of other departments), the appropriation for automatic flushing tanks, and Arizona avenue sewer.

Table 9 shows average cost per foot of sewers and the average cost of basins constructed by day labor.

Table 10 shows number of inspectors, foremen, and other employees of the sewer division in the offices of the chief clerk, engineer department, and the disbursing officer, inspector of asphalts and cements, and in the engineer department enables temporarily employed, and the appropriation from which these employees were paid for the year ending June 30, 1901.

Table 11 shows the number of electric conduits laid from March 27, 1900, to June 30, 1901, and the total number of feet of conduit in use at latter date.

Very respectfully, your obedient servant,

D. E. McCOMB,  
*Superintendent of Sewers.*

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,*  
*Engineer Commissioner District of Columbia.*  
(Through Captain Harding.)

TABLE 1.—Statement of sewers constructed under contracts

| Number of contract. | Contractor.          | Location.                                                                                         | Size of sewer.                        | Length of sewer. | Contract price per foot. |
|---------------------|----------------------|---------------------------------------------------------------------------------------------------|---------------------------------------|------------------|--------------------------|
|                     |                      |                                                                                                   |                                       | <i>Feet.</i>     |                          |
| 2769                | Andrew Gleeson ..    | North Capitol street, between G and I streets.                                                    | 20 feet diameter.                     | 288              | .....                    |
| 2744                | Adam McCandlish      | First street NE., between D and F streets.                                                        | 2.75 by 4.125 feet..                  | 448.5            | .....                    |
|                     |                      | do                                                                                                | 2 by 3 feet.....                      | 441.4            | .....                    |
|                     |                      | do                                                                                                | 2 by 3 feet.....                      | 7380.4           | .....                    |
| 2777                | Peyton D. Vinson..   | U street NW., between First and North Capitol streets.                                            | 21-inch .....                         | 788.2            | \$0.60                   |
|                     |                      | Brandywine, between Seventh and Fifth, and Fifth between Brandywine and Des Moines streets.       | 21-inch .....                         | 1,196.6          | .67                      |
|                     |                      | T street NW., between North Capitol and First streets.                                            | 21-inch .....                         | 815.5            | .63                      |
| 2632                | T. B. Jones & Co...  | North portion Tiber Creek and New Jersey avenue, high-level interceptor.                          | 14 feet by 14 feet 3 inches diameter. | 2,120.7          | .....                    |
|                     |                      |                                                                                                   | 9 feet by 11 feet diameter.           | 335.3            | .....                    |
| 2446                | J. K. Murphy .....   | Tiber Creek and New Jersey avenue, high-level intercepting.                                       | 14 feet by 14 feet 3 inches diameter. | 6,053.3          | .....                    |
|                     |                      |                                                                                                   |                                       | 7,866.3          | .....                    |
| 2743                | Jno. Jacoby .....    | East side intercepting sewer, Twelfth street SE. and pumping station.                             | 6.25 feet diameter                    | 3,394            | .....                    |
|                     |                      | East side intercepting, Twelfth street SE. and Twelfth street SE.                                 | 6 feet diameter                       | 359              | .....                    |
| 2889                | do .....             | Extension of boundary sewer.                                                                      | 22 feet diameter                      | 101              | .....                    |
|                     |                      |                                                                                                   | 9 feet diameter sewer.                | 1,438            | of 9-foot sewer.         |
|                     |                      |                                                                                                   | 9 feet diameter invert.               |                  |                          |
| 2837                | W. F. Brenizer ..... | Arizona avenue .....                                                                              | 8.75 feet diameter sewer.             | 534              | of 8.75-foot sewer.      |
|                     |                      |                                                                                                   | 8.75 feet diameter invert.            |                  |                          |
|                     |                      |                                                                                                   | Bell section .....                    | 15               |                          |
| 2870                | Peyton Vinson ....   | L street NW., between Twenty-first and Sixteenth streets.                                         | 6.5 feet diameter                     | 15               | .....                    |
|                     |                      |                                                                                                   | 5.75 feet diameter                    | 665              | .....                    |
|                     |                      |                                                                                                   | 5.5 feet diameter                     | 1,185            | .....                    |
| 2841                | Adam McCandlish.     | Sixteenth street NW., between K and L streets.                                                    | 2.4 by 2.72 feet...                   | 651.5            | .....                    |
|                     |                      |                                                                                                   | 24-inches diameter.                   | 229              | .....                    |
|                     |                      | Potomac Park, Twenty-sixth and River, and Twenty-sixth, between Water and D streets.              | 2.25 by 3.375 .....                   | 510.5            | .....                    |
|                     |                      | Nineteenth street NW., between Q and R streets.                                                   | 21-inch .....                         | 137.1            | .65                      |
|                     |                      |                                                                                                   | 24-inch .....                         | 585.3            | .70                      |
| 2870                | Peyton D. Vinson ..  | S street NW., between Fourteenth and Fifteenth streets.                                           | 24-inch .....                         | 543.3            | .74                      |
|                     |                      |                                                                                                   | 21-inch .....                         | 192.4            | .63                      |
|                     |                      |                                                                                                   | 18-inch .....                         | 69.1             | .52                      |
|                     |                      | Eighteenth street, Q and Corcoran, and New Hampshire avenue, Corcoran and Riggs.                  | 24-inch .....                         | 594.1            | .76                      |
|                     |                      | Fourteenth street NW., between R and S.                                                           | 21-inch .....                         | 73.7             | .64                      |
|                     |                      |                                                                                                   | 18-inch .....                         | 87.5             | .53                      |
|                     |                      |                                                                                                   | 15-inch .....                         | 478              | .49                      |
|                     |                      |                                                                                                   | 12-inch .....                         | 394.2            | .42                      |
| 2829                | Andrew Gleeson ..    | Valley of Piney Branch, between Fifth and Chesapeake, and Piney Branch road and Vermilion street. | 21-inch .....                         | 3,114.5          | .75                      |
|                     |                      |                                                                                                   | 18-inch .....                         | 3,880.6          | .65                      |
|                     |                      |                                                                                                   | 15-inch .....                         | 1,627.1          | .53                      |
|                     |                      |                                                                                                   | 12-inch .....                         | 999.6            | .45                      |

<sup>1</sup>Includes work previously reported upon.<sup>2</sup>Includes \$104 charged to contractor.<sup>3</sup>Includes \$27.23 for repairs to streets, and \$11.62 for raising fire hydrant, charged to contractor.<sup>4</sup>Cost of restoration of rubble walls in Capitol grounds, relaying water main in Arthur Place, and repairing outside of trench, charged to contractor.<sup>5</sup>Includes \$28 charged to contractor.<sup>6</sup>Includes \$9.93 cost of repairing water main, charged to contractor.



chargeable to appropriations for fiscal years 1900 and 1901.

| Allowance to contractor. | Material furnished |                 | Cost of inspection. | Cost of repairs to pavements. | Total cost. | Appropriation.                                                                         |
|--------------------------|--------------------|-----------------|---------------------|-------------------------------|-------------|----------------------------------------------------------------------------------------|
|                          | Chargeable.        | Not chargeable. |                     |                               |             |                                                                                        |
| \$3,164.20               | \$624.62           | -----           | \$149.00            | -----                         | \$3,937.82  | Cleaning and repairing sewers and basins, 1900.                                        |
| 2,651.30                 | 906.00             | \$20.30         | 2 380.00            | 3 \$607.52                    | 1 4,565.12  | Main and pipe sewers, 1900.                                                            |
| 7 808.32                 | -----              | -----           | 7 144.00            | -----                         | -----       |                                                                                        |
| 579.60                   | 103.89             | 463.94          | 56.00               | -----                         | 1,203.63    | Suburban sewers, 1900.                                                                 |
| 1,004.80                 | 267.40             | 703.74          | 140.00              | -----                         | 2,055.94    | Do.                                                                                    |
| 887.01                   | 107.67             | 467.14          | 40.00               | -----                         | 1,501.82    | Do.                                                                                    |
| 107,035.45               | 15,001.25          | 112.49          | 2,479.00            | 42,051.30                     | 126,679.49  | North portion Tiber Creek and New Jersey avenue, high-level intercepting sewer.        |
| 7 14,914.54              | -----              | -----           | -----               | -----                         | -----       |                                                                                        |
| 239,981.80               | 43,455.74          | 508.90          | 8,583.62            | 45,194.34                     | (1)         | Tiber Creek and New Jersey avenue, high-level intercepting sewer.                      |
| 7 58,065.90              | -----              | -----           | 7 1,990.00          | -----                         | -----       |                                                                                        |
| 51,574.04                | -----              | -----           | 2,362.50            | -----                         | (1)         | East side intercepting, between Twelfth street SE. and pumping station.                |
| 7 38,850.44              | -----              | -----           | 7 1,528.50          | -----                         | (9)         |                                                                                        |
| 20,757.10                | -----              | -----           | 1,503.50            | -----                         | (9)         | East side intercepting, between Twenty-second and A streets NE. and Twelfth street SE. |
| 4,886.98                 | -----              | -----           | 308.00              | -----                         | (9)         |                                                                                        |
| 22,748.03                | -----              | -----           | 804.00              | -----                         | (9)         | Extension boundary sewer, 1900.                                                        |
| 12,045.98                | -----              | -----           | 784.00              | -----                         | (9)         | Arizona avenue sewer.                                                                  |
| 1,973.05                 | -----              | -----           | 260.00              | -----                         | (9)         | L street sewer.                                                                        |
| 1,918.47                 | 580.24             | 93.07           | 176.00              | -----                         | 2,767.78    | Main and pipe sewers, 1901.                                                            |
| 1,444.78                 | 126.83             | 508.22          | 3 132.00            | 6 56.26                       | 2,268.09    | Do.                                                                                    |
| 1,475.36                 | 175.29             | 649.39          | 114.00              | 70.07                         | 2,484.11    | Do.                                                                                    |
| 1,600.06                 | 99.28              | 549.84          | 116.00              | 745.01                        | 3,119.19    | Do.                                                                                    |
| 1,061.67                 | 153.17             | 261.10          | 58.00               | 682.08                        | 2,216.02    | Replacing obstructed sewers, 1901.                                                     |
| 11,469.18                | 1,262.07           | 4,152.05        | 784.00              | -----                         | 17,667.30   | Suburban sewers, 1901.                                                                 |

<sup>1</sup> Figures in red show length of sewer constructed and allowance to contractor in fiscal year 1901.

<sup>2</sup> Includes cost of repairs to bulkhead Canal and E streets, restoring surface Garfield Park, restoring trees Delaware avenue, moving water mains South Capitol and C streets, restoring Capitol grounds, moving water-main valve in Reservation No. 17, moving fire hydrant Canal and E streets, moving and restoring street lamps Delaware avenue and Second and I streets, repairs to car tracks Canal and E streets, repairs to car tracks B street SE., charged to contractor.

<sup>3</sup> Work incomplete; payment made on account.

TABLE 2.—Statement of sewers laid under the appropriation for assessment

VOLUNTARY

| No. of order. | Location.                                                                  | Pipe sewers laid (length in feet). |          |          |          |          |          | Manholes. | Basins. | Branches. |
|---------------|----------------------------------------------------------------------------|------------------------------------|----------|----------|----------|----------|----------|-----------|---------|-----------|
|               |                                                                            | 8-inch.                            | 10-inch. | 12-inch. | 15-inch. | 18-inch. | 21-inch. |           |         |           |
| 17            | Belmont avenue NW., between Eighteenth and Columbia road.                  |                                    | 137      |          |          |          |          | 1         |         | 7         |
| 36            | Block 9, Bloomingdale.                                                     | 13                                 |          |          |          |          |          |           |         | 1         |
| 67            | Block 7, Bloomingdale.                                                     | 7                                  |          |          |          |          |          |           |         | 1         |
| 19            | Bridge street (Cleveland Park).                                            | 109                                |          |          |          |          |          | 1         |         | 2         |
|               | Connecticut avenue between Nourse and Pierce Mill road.                    |                                    |          |          | 797      |          |          | 1         |         |           |
| 2             | Decatur street NE., between O and P and First and North Capitol streets.   |                                    |          | 81       |          |          |          | 1         |         | 6         |
| 12            | D street NE., between Fourteenth and Fifteenth streets.                    |                                    |          | 359      |          |          |          | 1         |         | 7         |
| 25            | D street NE., between Fourteenth and Fifteenth streets.                    |                                    |          | 28       |          |          |          | 1         |         | 2         |
| 33            | Delaware avenue SW., between K and L streets.                              |                                    |          | 50       |          |          |          | 1         |         | 1         |
| 1             | Eighteenth street NW., between T and Willard streets.                      |                                    |          |          |          |          |          | 1         |         |           |
| 34            | Eighth street SE., between North Carolina avenue and A street.             |                                    | 179      |          |          |          |          | 2         |         | 7         |
| 5             | Folsom street (Cleveland Park).                                            | 48                                 |          |          |          |          |          |           |         | 3         |
| 13            | F street NE., between Third and Fourth streets.                            | 14                                 |          |          |          |          |          |           |         | 1         |
| 15            | Fourteenth street NE., between D and Duncan and crossing Tennessee avenue. |                                    | 152      |          |          |          |          | 1         |         | 4         |
| 24            | Fourteenth street NE., between D and Duncan streets.                       |                                    | 84       |          |          |          |          | 1         |         | 6         |
| 26            | Flagler street NW., between U and V streets.                               |                                    |          | 7 309    |          |          |          | 1         |         | 12        |
| 27            | Flagler street N.W., between W and Albany streets.                         |                                    | 394      |          |          |          |          | 4         |         | 14        |
| 28            | Flagler street N. W., between V and W streets.                             |                                    | 403      |          |          |          |          | 4         |         | 14        |
| 40            | First street N.W., between Randolph and S streets.                         |                                    | 123      |          |          |          |          |           |         | 6         |
| 41            | Northwest corner Fourteenth street and Pennsylvania avenue NW.             |                                    |          |          |          |          |          | 121       |         |           |
| 55            | Florida avenue NE., between Trinidad avenue and Fourteenth street.         |                                    |          |          | 8        |          |          | 1         |         | 1         |
| 61            | Fifteenth street NE., between G street and Maryland avenue.                |                                    | 26       |          |          |          |          |           |         | 1         |
| 62            | First street SW., between N and O streets.                                 |                                    |          | 26       |          |          |          |           |         | 1         |
| 63            | Block 1, Fairview Heights.                                                 | 285                                |          |          |          |          |          | 1         |         | 9         |
| 39            | G street SE., between Fourteenth and Fifteenth, and in square 1064.        |                                    | 228      | 168      |          |          |          | 5         |         | 27        |
|               | Klinge, Ford & Woodley roads, between Connecticut and Wisconsin avenues.   |                                    | 1,559.9  | 3,039.2  |          |          |          | 13        |         | 3         |
| 14            | K street NE., between First and Delaware avenue.                           |                                    |          |          | 11       |          |          |           |         | 1         |
| 16            | Kentucky avenue, between B and South Carolina avenue.                      |                                    | 20       |          |          |          |          |           |         | 1         |
| 51            | Kalorama avenue, between Eighteenth and Columbia road.                     |                                    |          | 68       |          |          |          |           |         | 1         |
| 11            | Kentucky avenue, between B and South Carolina avenue.                      |                                    | 16       |          |          |          |          |           |         | 2         |
| 69            | Block 7, Kalorama.                                                         |                                    | 150      |          |          |          |          | 180       |         | 3         |
| 54            | Crossing L'Enfant circle.                                                  |                                    |          |          |          |          |          | 1         |         |           |
| 7             | L street SE., between Thirteenth and Fourteenth streets.                   |                                    |          |          |          | 307      |          | 1         |         | 20        |
| 57            | L street SE., between Third and Fourth streets.                            |                                    | 103      |          |          |          |          | 2         |         | 2         |
| 8             | North Carolina avenue SE., between Seventh and Eighth streets.             |                                    |          | 62       |          |          |          |           |         | 1         |
| 22            | North Capitol, between T and Seaton, and T from North Capitol eastward.    |                                    | 138      | 127      |          |          |          | 1         |         | 8         |

<sup>1</sup> Balance brought from job 35.<sup>2</sup> Balance brought forward from job 60.<sup>3</sup> Constructed under contract 2009 by M. F. McNamara & Co.<sup>4</sup> Balance carried to job 15.<sup>5</sup> Balance brought forward from fiscal year 1900.<sup>6</sup> Balance brought from job 12.<sup>7</sup> There were 324 linear feet 6-inch pipe used in making connections.<sup>8</sup> Balance carried to job 27.

and permit work, and whole cost to applicant, for fiscal year 1901.

## SYSTEM.

| Amount of deposit. | Cost to District of Columbia. | Cost to applicant. | Total cost.          | Amount returned. | For whom done.                | Overseer.            | Date of completion.        |
|--------------------|-------------------------------|--------------------|----------------------|------------------|-------------------------------|----------------------|----------------------------|
| \$150.00           | \$150.00                      | \$150.00           | \$300.00             | -----            | Geo. S. Cooper                | Thomas               | Nov. 20, 1900              |
| (1) 9.01           | 9.02                          | 18.03              | -----                | -----            | Ray E. Middaugh               | Ward                 | Apr. 22, 1901              |
| (2) 4.27           | 4.27                          | 8.54               | -----                | -----            | Middaugh & Shannon            | do                   | June 29, 1901              |
| 85.00              | 61.08                         | 61.09              | 122.17               | \$23.91          | John Sherman                  | Thomas               | Oct. 19, 1900              |
| -----              | -----                         | -----              | 1,614.75             | -----            | -----                         | (3)                  | -----                      |
| 95.00              | 82.89                         | 82.89              | 165.78               | 12.11            | Saml. Ross                    | Prince               | July 28, 1900              |
| 450.00             | 257.00                        | 257.01             | 514.01               | (4)              | H. N. Taplin                  | do                   | Sept. 1, 1900              |
| 39.00              | 38.52                         | 38.52              | 77.04                | .48              | do                            | Thomas               | Nov. 15, 1900              |
| 55.00              | 40.50                         | 40.50              | 81.00                | 14.50            | Jno. F. Forsyth               | Ward                 | Jan. 10, 1901              |
| 547.20             | 36.44                         | 36.45              | 72.89                | 10.75            | E. L. McClelland              | do                   | July 25, 1900              |
| 160.00             | 157.64                        | 157.64             | 315.28               | 2.36             | A. B. Mullett & Co.           | do                   | Mar. 25, 1901              |
| 32.50              | 24.66                         | 24.67              | 49.33                | 7.83             | John Sherman                  | do                   | July 24, 1900              |
| 8.00               | 6.73                          | 6.73               | 13.46                | 1.27             | Richd. C. Gill                | Prince               | Aug. 25, 1900              |
| (5)                | 104.66                        | 104.66             | 209.32               | 88.33            | H. N. Taplin                  | do                   | Sept. 5, 1900              |
| 90.00              | 90.00                         | 90.00              | 180.00               | -----            | do                            | Thomas               | Nov. 14, 1900              |
| 930.00             | 306.21                        | 306.22             | 612.43               | (8)              | E. G. Stellwagen              | Ward                 | Apr. 17, 1901              |
| (9)                | 283.01                        | 283.00             | 566.01               | (10)             | do                            | do                   | Dec. 15, 1900              |
| (11)               | 200.04                        | 200.05             | 400.09               | 140.73           | do                            | do                   | Dec. 7, 1900               |
| 95.00              | 63.18                         | 63.17              | 126.35               | 31.83            | F. A. Blundon                 | Prince               | Apr. 19, 1901              |
| -----              | -----                         | -----              | 56.69                | -----            | -----                         | Lanigan              | Feb. 25, 1901              |
| 30.00              | 25.22                         | 25.22              | 50.44                | 4.78             | Sunderland Bros               | Prince               | May 1, 1901                |
| 18.00              | 12.08                         | 12.09              | 24.17                | 5.91             | H. Adams                      | Ward                 | June 4, 1901               |
| 20.00              | 17.07                         | 17.07              | 34.14                | 2.93             | Wm. Dudley, trustee.          | Thomas               | June 18, 1901              |
| 185.00             | 130.35                        | 130.34             | 260.69               | 54.66            | F. R. Sale                    | Ward                 | June 23, 1901              |
| 381.50             | 381.50                        | 381.50             | 763.00               | -----            | T. H. Pickford                | do                   | Feb. 23, 1901              |
| 3,440.00           | 2,617.92                      | 2,617.92           | 5,235.84             | 822.08           | Geo. Truesdell                | Mackey <sup>13</sup> | Sept. 15, 1900             |
| 17.00              | 13.42                         | 13.42              | 26.84                | 3.58             | Nolan & Sons                  | Prince               | Sept. 25, 1900             |
| 14.00              | 9.54                          | 9.54               | 19.08                | 4.46             | John H. Walter                | do                   | Nov. 19, 1900              |
| 100.00             | 65.37                         | 65.37              | 130.74               | 34.63            | Vernon Bailey                 | Thomas               | Apr. 29, 1901              |
| 12.00              | 8.31                          | 8.31               | 16.62                | 3.69             | Jno. H. Walter                | Prince               | Nov. 19, 1900              |
| 115.00             | 90.15                         | 90.16              | 180.31               | 24.84            | Mrs. J. M. Patten             | Ward                 | June 26, 1901              |
| 289.00             | 270.73                        | 270.73             | 541.46               | 18.27            | The Capital Trac-<br>tion Co. | do                   | May 2, 1901                |
| 365.00             | <sup>14</sup> 426.40          | 365.00             | <sup>14</sup> 791.40 | -----            | Thos. Gordon                  | Prince               | July 31, 1900              |
| 105.00             | 86.69                         | 86.70              | 173.39               | 18.30            | Jas. E. Jenkins               | Lanigan              | <sup>15</sup> July 2, 1901 |
| 35.00              | 33.20                         | 33.21              | 66.41                | 1.79             | Jacob F. Raub                 | Prince               | Aug. 10, 1900              |
| 215.00             | 181.15                        | 181.15             | 362.30               | 33.85            | Ray E. Middaugh               | Thomas               | Mar. 19, 1901              |

<sup>9</sup> Balance brought from job 26.

<sup>10</sup> Balance carried to job 28.

<sup>11</sup> Balance brought from job 27.

<sup>12</sup> Basin constructed upon request of computing engineer in connection with surface work.

<sup>13</sup> Constructed under contract 2776, by Peyton D. Vinson.

<sup>14</sup> Includes \$61.40 charged to the appropriation for "Main and pipe sewers," 1901.

<sup>15</sup> Repairs to pavements made in fiscal year 1902.

TABLE 2.—Statement of sewers laid under the appropriation for assessment and VOLUNTARY

| No. of order. | Location.                                                                                                        | Pipe sewers laid (length in feet). |          |          |          |          |          | Manholes. | Basins. | Branches. |
|---------------|------------------------------------------------------------------------------------------------------------------|------------------------------------|----------|----------|----------|----------|----------|-----------|---------|-----------|
|               |                                                                                                                  | 8-inch.                            | 10-inch. | 12-inch. | 15-inch. | 18-inch. | 21-inch. |           |         |           |
| 30            | New Jersey avenue SE., from south side K street northward.                                                       | -----                              | -----    | 98       | -----    | -----    | -----    | -----     | -----   | 1         |
| 35            | North Capitol, between Randolph and S streets.                                                                   | -----                              | -----    | 91       | -----    | -----    | -----    | -----     | -----   | 5         |
| 42            | North Capitol, between H and De-frees.                                                                           | 51                                 | -----    | -----    | -----    | -----    | -----    | -----     | -----   | 3         |
| 56            | Square 969 .....                                                                                                 | -----                              | 148      | -----    | -----    | -----    | -----    | 1         | -----   | 2         |
| 58            | North side North Carolina avenue SE., between Seventh and Eighth streets.                                        | -----                              | -----    | 26       | -----    | -----    | -----    | -----     | -----   | 1         |
| 66            | North Capitol street NW., between Seaton and T streets.                                                          | -----                              | -----    | 100      | -----    | -----    | -----    | 1         | -----   | 5         |
| 53            | O street NW., between North Capitol and First streets.                                                           | -----                              | -----    | 233      | -----    | -----    | -----    | 1         | -----   | 1         |
| 65            | P street NW., between Eleventh and Twelfth streets.                                                              | -----                              | 108      | -----    | -----    | -----    | -----    | 1         | -----   | 6         |
| 49            | Quincy street NE., from Third street westward.                                                                   | -----                              | -----    | 258      | -----    | -----    | -----    | -----     | -----   | -----     |
| 37            | R street NW., between North Capitol and First streets.                                                           | -----                              | 68       | -----    | -----    | -----    | -----    | -----     | -----   | 4         |
| 18            | Sheridan street NW., from Piney Branch road eastward.                                                            | -----                              | 121      | -----    | -----    | -----    | -----    | -----     | -----   | 5         |
| 38            | Sixth street SW., between Maryland and Maine avenues, and Maine avenue, between Four-and-a-half and Sixth.       | -----                              | 201      | -----    | -----    | -----    | -----    | 1         | -----   | 6         |
| 64            | Square 672 .....                                                                                                 | -----                              | 31       | -----    | -----    | -----    | -----    | -----     | -----   | 10        |
| 3             | Thirty-fourth street, from Newark street northward.                                                              | 55                                 | -----    | -----    | -----    | -----    | -----    | -----     | -----   | 10        |
| 6             | Thirty-sixth street NW., between O and P streets.                                                                | -----                              | 116      | -----    | -----    | -----    | -----    | -----     | -----   | 4         |
| 9             | Square 1010 .....                                                                                                | -----                              | -----    | 62       | -----    | -----    | -----    | -----     | -----   | 4         |
| 21            | Square 293 .....                                                                                                 | 35                                 | -----    | 80       | -----    | -----    | -----    | -----     | -----   | 4         |
| 23            | Square 378 .....                                                                                                 | -----                              | -----    | 80       | -----    | -----    | -----    | -----     | -----   | 4         |
| 31            | Thirty-sixth street NW., between Woodley road and Pierrepont, and Pierrepont, from Thirty-sixth street westward. | 544                                | -----    | -----    | -----    | -----    | -----    | 2         | -----   | 14        |
| 44            | East curb Twenty-fifth and west curb New Hampshire avenue.                                                       | -----                              | 84       | -----    | -----    | -----    | -----    | -----     | 1       | -----     |
| 45            | East curb Twenty-sixth and west curb New Hampshire avenue.                                                       | -----                              | 63       | -----    | -----    | -----    | -----    | -----     | 1       | -----     |
| 46            | East curb Twenty-fifth street and east curb New Hampshire avenue.                                                | -----                              | 15       | -----    | -----    | -----    | -----    | -----     | 1       | -----     |
| 47            | Twenty-second street NW., between M and N streets.                                                               | -----                              | -----    | 20       | -----    | -----    | -----    | -----     | -----   | 1         |
| 50            | Square 1010 .....                                                                                                | -----                              | -----    | 114      | -----    | -----    | -----    | 1         | -----   | -----     |
| 52            | Thirteenth street NE., between G street and Maryland avenue.                                                     | -----                              | 87       | -----    | -----    | -----    | -----    | 1         | -----   | 3         |
| 60            | Thirty-sixth street NW., between Pierrepont and Milwaukee.                                                       | 203                                | -----    | -----    | -----    | -----    | -----    | 1         | -----   | 4         |
| 68            | Third street NE., between East Capitol and A streets.                                                            | -----                              | -----    | 55       | -----    | -----    | -----    | -----     | -----   | 2         |
| 4             | Virginia avenue SE., between Second and Third streets.                                                           | -----                              | -----    | 176      | -----    | -----    | -----    | 1         | -----   | 4         |
| 20            | North side Virginia avenue NW., from Twenty-third street eastward.                                               | -----                              | -----    | 41       | -----    | -----    | -----    | -----     | -----   | 1         |
| 29            | Vernon street NW., between Eighth and Nineteenth streets.                                                        | -----                              | 42       | -----    | -----    | -----    | -----    | -----     | -----   | 3         |
| 43            | South curb Virginia avenue and east curb Twenty-fifth street NW.                                                 | -----                              | 87       | -----    | -----    | -----    | -----    | -----     | 1       | -----     |
| 10            | Block 7, Washington Heights                                                                                      | -----                              | -----    | 336      | -----    | -----    | -----    | 1         | -----   | 6         |
| 32            | W street NE., from west side Fourth street westward.                                                             | -----                              | 38       | -----    | -----    | -----    | -----    | -----     | -----   | 1         |
| Total .....   |                                                                                                                  | 1,364                              | 4,921.9  | 6,007.2  | 816      | 307      | 180      | 57        | 5       | 273       |

<sup>1</sup> Balance carried to job 36.<sup>2</sup> Awaiting bill for repairs to pavements.

permit work, and whole cost to applicant, for fiscal year 1901—Continued.

SYSTEM.

| Amount of deposit. | Cost to District of Columbia. | Cost to applicant. | Total cost. | Amount returned. | For whom done.                      | Overseer.     | Date of completion.         |
|--------------------|-------------------------------|--------------------|-------------|------------------|-------------------------------------|---------------|-----------------------------|
| \$80.00            | \$70.59                       | \$70.59            | \$141.18    | \$9.41           | Washington Fertilizer Co.           | Thomas .....  | Apr. 1, 1901                |
| 82.50              | 73.49                         | 73.48              | 146.97      | ( <sup>1</sup> ) | Ray E. Middaugh                     | Ward .....    | Apr. 9, 1901                |
| 30.00              | 26.37                         | 26.38              | 52.75       | 3.62             | C. V. Sparrow                       | Lanigan ..... | Mar. 11, 1901               |
| 115.00             | 80.02                         | 80.03              | 160.05      | 34.97            | The Potomac Insurance Co.           | do .....      | May 21, 1901                |
| 20.00              | 16.61                         | 16.60              | 33.21       | 3.40             | Jas. D. Darnall                     | do .....      | June 1, 1901                |
| 90.00              | ( <sup>2</sup> )              |                    |             |                  | Middaugh & Shannon.                 | Ward .....    | ( <sup>2</sup> )            |
| 195.00             | 145.45                        | 145.45             | 290.90      | 49.55            | Washington Sanitary Improvement Co. | Prince .....  | Apr. 30, 1901               |
| 92.00              | 81.33                         | 81.23              | 162.66      | 10.67            | A. P. Clarke, jr.                   | Condon .....  | <sup>15</sup> July 10, 1901 |
| 220.00             | 140.65                        | 140.65             | 281.30      | 79.35            | Washington Sanitary Improvement Co. | Lanigan ..... | Apr. 13, 1901               |
| 65.00              | 55.46                         | 55.46              | 110.92      | 9.54             | Ray E. Middaugh                     | Ward .....    | Mar. 22, 1901               |
| 90.00              | 90.00                         | 90.00              | 180.00      |                  | Kennedy & Davis                     | Thomas ..     | Oct. 23, 1900               |
| 144.00             | 115.29                        | 115.30             | 230.59      | 28.70            | Jas. W. Tyler                       | do .....      | May 6, 1901                 |
| 26.71              | 26.70                         | 26.71              | 53.41       |                  | The Chapin-Sacks Co.                | do .....      | June 14, 1901               |
| 32.50              | 28.16                         | 28.16              | 56.32       | 4.34             | John Sherman                        | Ward .....    | July 22, 1900               |
| 84.00              | 75.50                         | 75.50              | 151.00      | 8.50             | Jno. J. Horrigan                    | Thomas .....  | July 25, 1900               |
| 51.00              | 41.87                         | 41.87              | 83.74       | 9.13             | S. Carr                             | Prince .....  | Aug. 13, 1900               |
| 25.00              | 15.11                         | 15.12              | 30.23       | 9.88             | F. W. Graham                        | Thomas ..     | Nov. 9, 1900                |
| 85.00              | 50.22                         | 50.22              | 100.44      | 34.78            | Gasch Bros.                         | Prince .....  | Dec. 21, 1900               |
| 389.00             | 295.00                        | 295.00             | 590.00      | 94.00            | Thos. J. Fisher & Co.               | do .....      | Dec. 19, 1900               |
|                    | 58.81                         | <sup>3</sup> 58.82 | 117.63      |                  | Capital Traction Co.                | Lanigan ..    | Apr. 18, 1901               |
|                    | 52.08                         | <sup>3</sup> 52.08 | 104.16      |                  | do                                  | do .....      | Apr. 22, 1901               |
|                    | 33.01                         | <sup>3</sup> 33.00 | 66.01       |                  | do                                  | do .....      | Apr. 17, 1901               |
| 18.00              | 13.25                         | 13.25              | 26.50       | 4.75             | E. L. McClelland                    | Prince .....  | Apr. 27, 1901               |
| 101.50             | 79.57                         | 79.57              | 159.14      | 21.93            | Richard Knight                      | Ward .....    | Apr. 10, 1901               |
| 80.00              | 55.50                         | 55.51              | 111.01      | 24.49            | S. Carr                             | Prince .....  | May 2, 1901                 |
| 140.00             | 112.88                        | 112.88             | 225.76      | 27.12            | J. N. Baker                         | Lanigan ..    | June 24, 1901               |
| 44.00              | ( <sup>2</sup> )              |                    |             |                  | Mrs. Garland                        | Ward .....    | ( <sup>2</sup> )            |
| 130.00             | 130.00                        | 130.00             | 260.00      |                  | C. F. Norment                       | Prince .....  | Aug. 4, 1900                |
| 32.00              | 29.48                         | 29.47              | 58.95       | 2.53             | W. F. Davidson                      | Thomas ..     | Oct. 27, 1900               |
| 42.00              | 42.00                         | 42.00              | 84.00       |                  | Bates Warren                        | do .....      | Mar. 16, 1901               |
|                    | 46.91                         | <sup>3</sup> 46.91 | 93.82       |                  | Capital Traction Co.                | Lanigan ..    | Apr. 4, 1901                |
| 281.00             | 213.88                        | 213.88             | 427.76      | 67.12            | John H. Nolan                       | Ward .....    | Aug. 13, 1900               |
| 30.00              | 20.21                         | 20.21              | 40.42       | 9.79             | E. F. Kennedy                       | Lanigan ..    | Dec. 28, 1900               |
| 10,393.41          | 8,600.34                      | 8,539.05           | 18,810.83   | 1,914.72         |                                     |               |                             |

<sup>3</sup> Chargeable to the general deposit of the Capital Traction Co.

TABLE 3.—Statement of sewers laid under the appropriation for assessment

ASSESSMENT

| No. of order. | Location.                                                           | Pipe sewers laid (length in feet). |          |          |          |          |
|---------------|---------------------------------------------------------------------|------------------------------------|----------|----------|----------|----------|
|               |                                                                     | 8-inch.                            | 10-inch. | 12-inch. | 15-inch. | 18-inch. |
| 132           | Block 7, Bloomingdale.....                                          |                                    |          |          | 206.5    |          |
| 164           | do.....                                                             |                                    |          | 25       | 75       |          |
| 165           | do.....                                                             |                                    |          | 256      |          |          |
| 172           | Blair road, between Vermillion street and Chestnut avenue.          |                                    | 695      |          |          |          |
| 129           | Brightwood avenue, between Quincy and Philadelphia streets.         |                                    |          | 391      |          |          |
| 143           | Champlain avenue, from Superior street northward.                   |                                    |          | 467.5    |          |          |
| 144           | do.....                                                             |                                    | 261.5    |          |          |          |
| 175           | Chestnut avenue, between Blair road and Baltimore and Ohio R. R.    | 600                                |          |          |          |          |
| 178           | Chestnut avenue, from Baltimore and Ohio R. R. eastward.            | 227.5                              |          |          |          |          |
| 100           | Connecticut avenue, between Klinge Ford road and Newark street.     |                                    |          | 608.1    |          |          |
| 181           | Carroll avenue, between Maple avenue and Baltimore and Ohio R. R.   |                                    |          |          |          |          |
| 113           | South side D street NE., between Ninth and Tenth streets.           |                                    |          | 220      |          |          |
| 114           | North side D street NE., between Ninth and Tenth streets.           |                                    |          | 224      |          |          |
| 154           | North side D street NW., between Nineteenth and Twentieth streets.  |                                    |          | 331.5    |          |          |
| 157           | South side D street NW., between Eighteenth and Nineteenth streets. |                                    |          | 376      |          |          |
| 158           | North side D street NW., between Eighteenth and Nineteenth streets. |                                    |          | 376      |          |          |
| 117           | Eighth street NW., between Savannah and Trenton streets.            |                                    | 70       | 397      |          |          |
| 140           | Erie street NW., between Ontario and Champlain avenues.             |                                    |          | 221      |          |          |
| 159           | East Capitol street SE., between Fourteenth and Fifteenth streets.  |                                    | 172.5    |          |          |          |
| 160           | do.....                                                             |                                    |          | 275.5    |          |          |
| 162           | Eighteenth street NW., between D street and Virginia avenue.        |                                    |          | 442      |          |          |
| 105           | F street NE., between Third and Fourth streets.                     |                                    |          | 322      |          |          |
| 106           | First street NW., between N street and New York avenue.             |                                    |          | 250      |          |          |
| 109           | Fifth street NE., between E and F streets.                          |                                    |          | 340      |          |          |
| 118           | Alley, between Fillmore and Polk and Arthur and Jefferson.          |                                    | 165      |          |          |          |
| 120           | Flint street NW., between Eighth and Ninth streets.                 | 430                                |          |          |          |          |
| 125           | Flint street NW., between Fifth and Seventh streets.                |                                    | 600.1    |          |          |          |
| 126           | Flint street NW., between Seventh and Eighth streets.               | 429.9                              |          |          |          |          |
| 137           | Square 514.....                                                     |                                    |          | 121      |          |          |
| 149           | Fifth street SE., between Virginia avenue and G street.             |                                    |          | 355      |          |          |
| 180           | First and K streets NE., (northeast corner)...                      |                                    |          | 3        |          |          |
| 169           | Georgia avenue SE., between Twelfth and Thirteenth streets.         |                                    | 138      | 36       |          |          |
| 173           | Georgia avenue and Tenth street SE.....                             |                                    |          |          |          |          |
| 121           | Harrison street, between Minnesota and Adams streets.               |                                    |          | 389      |          |          |
| 123           | Harrison street, between Adams and Sixteenth streets.               |                                    | 331      |          |          |          |
| 127           | Harrison street, from Sixteenth street eastward.                    |                                    | 610      |          |          |          |
| 131           | H street SW., between Water and Ninth streets.                      |                                    | 260      |          |          |          |
| 138           | H street NE., between Thirteenth and Fourteenth streets.            |                                    | 283.5    |          |          |          |
| 151           | H street SW., between Half and First streets.                       |                                    |          | 339      |          |          |
| 153           | Half street SE., between M and N streets.....                       |                                    |          | 290      |          |          |
| 155           | H street SW., between Half and First streets.                       |                                    | 202      |          |          |          |
| 145           | I street SW., between Seventh and Eighth streets.                   |                                    |          | 125      |          |          |
| 112           | Northeast corner Kentucky avenue and E street SE.                   |                                    |          |          |          |          |

<sup>1</sup> Work completed in fiscal year 1902.<sup>2</sup> Includes cost of pavements repaired in fiscal year 1902.

and permit work, and whole cost to applicant, for fiscal year 1901.

SYSTEM.

| Basins constructed. | Manholes.        | Branches. | Cost to District of Columbia. | Cost to property owner. | Total cost.         | Overseer. | Date of completion.         |
|---------------------|------------------|-----------|-------------------------------|-------------------------|---------------------|-----------|-----------------------------|
|                     |                  | 3         | \$114.82                      | \$114.82                | \$229.64            | Thomas    | Nov. 28, 1900               |
|                     | 1                | 3         | 84.25                         | 84.25                   | 168.50              | Prince    | May 2, 1901                 |
|                     | 2                | 3         | 166.66                        | 166.67                  | 333.33              | do        | May 6, 1901                 |
|                     |                  | 13        | 406.60                        | 406.60                  | 813.20              | do        | June 5, 1901                |
|                     | 3                | 1         | 345.02                        | 345.02                  | 690.04              | Ward      | Jan. 22, 1901               |
|                     | 3                | 9         | 344.21                        | 344.22                  | 688.43              | Prince    | Apr. 30, 1901               |
|                     | 2                | 15        | 197.30                        | 197.30                  | 394.60              | do        | Do.                         |
|                     | 2                | 15        | 204.58                        | 204.58                  | 529.16              | do        | June 10, 1901               |
|                     | 1                | 5         | 115.92                        | 115.92                  | 231.84              | do        | June 14, 1901               |
|                     | 4                | 1         | 440.22                        | 440.22                  | 880.44              | Ward      | July 16, 1900               |
|                     |                  |           | 8.48                          | 8.48                    | 16.96               | Prince    | ( <sup>1</sup> )            |
|                     | 1                |           | 131.75                        | 131.76                  | 263.51              | do        | Sept. 7, 1900               |
|                     | 1                | 1         | 143.64                        | 143.63                  | 287.27              | do        | Oct. 22, 1900               |
|                     | 2                | 2         | 209.48                        | 209.48                  | 418.96              | do        | Apr. 1, 1901                |
|                     | 2                |           | 220.51                        | 220.52                  | 441.03              | do        | Apr. 8, 1901                |
|                     | 2                | 1         | 206.63                        | 206.64                  | 413.27              | do        | Apr. 12, 1901               |
|                     | 2                | 2         | 290.63                        | 290.63                  | 581.26              | Ward      | Sept. 19, 1900              |
|                     | 1                | 6         | 143.14                        | 143.15                  | 286.29              | Prince    | Jan. 15, 1901               |
|                     | 1                | 10        | 104.59                        | 104.58                  | 209.17              | Ward      | Apr. 18, 1901               |
|                     | 1                | 1         | 167.08                        | 167.08                  | <sup>2</sup> 334.16 | do        | July 5, 1901                |
|                     | 2                |           | 297.07                        | 297.07                  | 594.14              | Prince    | Apr. 23, 1901               |
|                     | 2                | 5         | 206.15                        | 206.15                  | 412.30              | do        | Aug. 20, 1900               |
|                     | 1                |           | 206.11                        | 206.10                  | 412.21              | Thomas    | Aug. 23, 1900               |
|                     | 2                |           | 254.70                        | 254.70                  | 509.40              | Prince    | Sept. 27, 1900              |
|                     | 1                | 7         | 121.38                        | 121.37                  | 242.75              | do        | Sept. 20, 1900              |
|                     | 2                | 16        | 279.92                        | 279.92                  | 559.84              | Ward      | Sept. 25, 1900              |
|                     | 2                | 24        | 396.17                        | 396.17                  | 792.34              | do        | Nov. 2, 1900                |
|                     | 2                | 16        | 204.97                        | 204.98                  | 409.95              | do        | Nov. 6, 1900                |
|                     | 2                | 7         | 120.52                        | 120.52                  | 241.04              | Thomas    | Apr. 1, 1901                |
|                     | 1                | 6         | 225.42                        | 225.42                  | 450.84              | Prince    | June 3, 1901                |
| 1                   |                  |           |                               |                         | 52.72               | Lanigan   | <sup>3</sup> June 27, 1901  |
|                     | 2                | 8         | 121.00                        | 121.01                  | 242.01              | Ward      | May 10, 1901                |
|                     | ( <sup>4</sup> ) |           |                               |                         | 6.66                | Lanigan   | <sup>3</sup> May 16, 1901   |
|                     | 2                | 9         | 389.45                        | 389.46                  | 778.91              | Prince    | Nov. 27, 1900               |
|                     | 1                | 24        | 300.07                        | 300.07                  | 600.14              | do        | Oct. 23, 1900               |
|                     | 3                | 46        | 506.31                        | 506.31                  | 1,012.62            | do        | Nov. 9, 1900                |
|                     | 1                | 5         | 157.96                        | 157.96                  | 315.92              | Ward      | June 5, 1901                |
|                     | 2                | 3         | 261.21                        | 261.22                  | 522.43              | Thomas    | Mar. 30, 1901               |
|                     | 1                |           | 160.39                        | 160.39                  | 320.78              | Lanigan   | Mar. 26, 1901               |
|                     | 1                |           | 153.72                        | 153.73                  | 307.45              | Ward      | Mar. 31, 1901               |
|                     | 1                | 11        | 96.34                         | 96.34                   | 192.68              | Lanigan   | May 8, 1901                 |
|                     | 1                | 4         | 91.90                         | 91.91                   | 183.81              | Ward      | Mar. 11, 1901               |
| 1                   |                  |           |                               |                         | 43.93               | Lanigan   | <sup>3</sup> Sept. 29, 1900 |

<sup>3</sup> Work performed at request of surface department.

<sup>4</sup> One manhole adjusted.

TABLE 3.—Statement of sewers laid under the appropriation for assessment and  
ASSESSMENT

| No. of order. | Location.                                                                  | Pipe sewers laid (length in feet). |          |          |          |          |
|---------------|----------------------------------------------------------------------------|------------------------------------|----------|----------|----------|----------|
|               |                                                                            | 8-inch.                            | 10-inch. | 12-inch. | 15-inch. | 18-inch. |
| 136           | King street NE., between Bladensburg road and Trinidad street.             |                                    | 102.4    |          |          |          |
| 133           | Levis street, between Trinidad street and Bladensburg road.                |                                    | 135      |          |          |          |
| 139           | L street SE., between Half and South Capitol streets.                      |                                    |          | 160      |          |          |
| 148           | L street SE., between Half and First streets (south side).                 |                                    |          | 260      |          |          |
| 150           | L street SE., between Half and First streets (north side).                 |                                    |          | 260      |          |          |
| 161           | L street SE., between Thirteenth and Fourteenth streets.                   |                                    |          |          | 250      | 84       |
| 103           | Massachusetts avenue, from Sheridan circle westward.                       |                                    |          | 167      |          |          |
| 168           | Maple avenue, between Nichols avenue and Spring street.                    |                                    | 203      |          |          |          |
| 171           | Maple avenue, between Spring and High streets.                             | 407                                | 420      | 25       |          |          |
| 179           | Maple avenue, between Baltimore and Ohio R. R. and Carroll avenue.         |                                    | 528      |          |          |          |
| 101           | O street NW., between Twenty-eighth and Twenty-ninth streets (north side). |                                    |          |          |          |          |
| 107           | O street NW., between Twenty-eighth and Twenty-ninth streets (south side). |                                    |          |          |          |          |
| 104           | Newark street NW., from Connecticut avenue westward.                       | 621                                |          |          |          |          |
| 108           | Newport place (square 69).                                                 |                                    |          | 285      |          |          |
| 110           | New York avenue NW., between Twenty-first and Twenty-second streets.       |                                    |          | 290      |          |          |
| 111           | New York avenue NW., between Twenty-second and Twenty-third streets.       |                                    |          | 333      |          |          |
| 115           | New York avenue NW., between Virginia avenue and Twentieth street.         |                                    |          | 195      |          |          |
| 122           | Northeast corner Nineteenth and Q streets NW.                              |                                    |          |          | 6        |          |
| 142           | N street NW., between Nineteenth and Twentieth street NW.                  | 46                                 |          |          |          |          |
| 152           | New York avenue NW., between Nineteenth and Twentieth streets.             |                                    |          | 255      |          |          |
| 170           | New York avenue NW., between Fourteenth and Fifteenth streets.             |                                    |          | 339      |          |          |
| 177           | Piney Branch Road, between Vermilion and Umatilla streets.                 |                                    | 391      |          |          |          |
| 130           | Philadelphia street, between Brightwood avenue and Eighth street.          |                                    | 274.5    |          |          |          |
| 156           | Pennsylvania avenue SE., between Fourteenth and Fifteenth streets.         |                                    |          | 450      |          |          |
| 167           | Northwest corner Pennsylvania avenue and Jackson place.                    |                                    |          |          |          |          |
| 147           | Quincy street NE., between Frankfort and Hartford streets.                 |                                    |          | 238      |          |          |
| 116           | S street NW., between First and Second streets.                            |                                    | 222      | 218      |          |          |
| 119           | Shannon place from Navy place southward.                                   |                                    |          | 430      |          |          |
| 124           | Second street SW., between C and D streets.                                | 15.5                               |          |          |          |          |
| 128           | Square 750.                                                                | 55                                 | 160.4    | 204      |          |          |
| 106           | South side Sheridan circle from Twenty-third street westward.              |                                    |          | 112      |          |          |
| 102           | Twelfth street NE., between Providence and Lansing streets.                |                                    | 151      |          |          |          |
| 134           | Trinidad street NE., from Levis street southward.                          |                                    | 136.5    | 18       |          |          |
| 135           | Trinidad street NE., from King street northward.                           |                                    |          | 257      |          |          |
| 141           | Square 24.                                                                 |                                    | 140      |          |          |          |
| 146           | Twelfth street SE., between D and E streets.                               |                                    | 64       |          |          |          |
| 163           | Wallace street, between Frankfort and Hartford streets.                    |                                    | 142      |          |          |          |
| Total.....    |                                                                            | 2,831.9                            | 6,948.4  | 11,657.6 | 6,375    | 84       |

<sup>1</sup> Awaiting bill for repairs to pavements.<sup>2</sup> One manhole adjusted.<sup>3</sup> Sewer constructed in fiscal year 1900.



permit work, and whole cost to applicant, for fiscal year 1901—Continued.

SYSTEM.

| Basins constructed. | Manholes. | Branches. | Cost to District of Columbia. | Cost to property owner. | Total cost.      | Overseer.     | Date of completion.        |
|---------------------|-----------|-----------|-------------------------------|-------------------------|------------------|---------------|----------------------------|
|                     | 1         | 13        | \$82.12                       | \$82.11                 | \$124.23         | Prince .....  | Mar. 1, 1901               |
|                     | 1         | 7         | 82.93                         | 82.94                   | 165.87           | do .....      | Feb. 27, 1901              |
|                     | 1         | 2         | 139.62                        | 139.62                  | 279.24           | Ward .....    | Jan. 14, 1901              |
|                     | 1         |           | 148.67                        | 148.67                  | 297.34           | do .....      | Mar. 16, 1901              |
|                     | 1         |           | 142.77                        | 142.76                  | 285.53           | do .....      | Apr. 1, 1901               |
|                     | 1         | 16        | 399.18                        | 399.18                  | 798.36           | do .....      | May 7, 1901                |
|                     |           | 7         | 118.11                        | 118.12                  | 236.23           | Thomas .....  | July 31, 1900              |
|                     | 1         | 9         | 141.93                        | 141.93                  | 283.86           | Ward .....    | June 5, 1901               |
|                     | 4         | 41        |                               |                         | ( <sup>1</sup> ) |               | ( <sup>2</sup> )           |
|                     | 2         | 15        | 301.25                        | 301.26                  | 602.51           | Prince .....  | June 29, 1901              |
|                     | 2         |           | 42.98                         | 42.98                   | 85.96            | Thomas .....  | <sup>3</sup> July 27, 1900 |
|                     |           |           | 10.75                         | 10.75                   | 21.50            | do .....      | <sup>3</sup> July 20, 1900 |
|                     | 2         | 26        | 513.80                        | 513.80                  | 1,027.60         | Ward .....    | Aug. 8, 1900               |
|                     | 1         |           | 325.72                        | 325.72                  | 651.44           | do .....      | <sup>4</sup> Aug. 24, 1900 |
|                     | 1         | 2         | 186.84                        | 186.84                  | 373.68           | do .....      | Aug. 30, 1900              |
|                     |           | 2         | 323.80                        | 323.80                  | 647.60           | do .....      | Sept. 8, 1900              |
|                     | 1         | 4         | 122.29                        | 122.29                  | 244.58           | do .....      | Sept. 11, 1900             |
| 1                   |           |           |                               |                         | 51.23            | Lanigan ..... | <sup>5</sup> Oct. 3, 1900  |
|                     | 1         | 3         | 40.96                         | 40.95                   | 81.91            | do .....      | Jan. 16, 1901              |
|                     | 2         | 7         | 162.83                        | 162.83                  | 325.66           | Prince .....  | Mar. 26, 1901              |
|                     | 1         | 7         | 264.43                        | 264.43                  | 528.86           | do .....      | June 19, 1901              |
|                     | 1         | 8         | 225.25                        | 225.25                  | 450.50           | Lanigan ..... | June 15, 1901              |
|                     | 1         | 10        | 208.31                        | 208.31                  | 416.62           | Ward .....    | Nov. 23, 1900              |
|                     | 2         | 7         | 316.58                        | 316.59                  | 633.17           | do .....      | June 5, 1901               |
| 1                   |           |           |                               |                         | 59.93            | Lanigan ..... | <sup>6</sup> May 3, 1901   |
|                     | 2         | 5         | 220.25                        | 220.25                  | 440.50           | Prince .....  | Mar. 13, 1901              |
|                     | 2         | 13        | 219.24                        | 219.25                  | 438.49           | do .....      | Oct. 15, 1900              |
|                     | 2         | 15        | 290.16                        | 290.16                  | 580.32           | do .....      | Oct. 1, 1900               |
|                     | 3         | 2         | 7.51                          | 7.51                    | 15.02            | Ward .....    | Feb. 26, 1901              |
|                     | 1         | 19        | 344.20                        | 344.21                  | 688.41           | Thomas .....  | Mar. 19, 1901              |
|                     | 1         | 1         | 95.27                         | 95.27                   | 190.54           | Lanigan ..... | May 20, 1901               |
|                     | 1         | 4         | 102.76                        | 102.77                  | 205.53           | Prince .....  | <sup>6</sup> July 5, 1900  |
|                     | 2         | 10        | 103.10                        | 103.10                  | 206.20           | do .....      | Feb. 26, 1901              |
|                     | 2         | 5         | 164.52                        | 164.52                  | 329.04           | do .....      | Mar. 7, 1901               |
|                     | 1         | 9         | 93.62                         | 93.62                   | 187.24           | Lanigan ..... | Jan. 12, 1901              |
|                     |           | 3         | 39.79                         | 39.79                   | 79.58            | do .....      | Mar. 7, 1901               |
|                     | 1         | 3         | 101.53                        | 101.53                  | 203.06           | do .....      | May 3, 1901                |
| 4                   | 100       | 557       | 14,725.34                     | 14,725.46               | 29,665.27        |               |                            |

<sup>4</sup> The excessive cost of this work is due to the large amount of rock excavation.

<sup>5</sup> Work performed at request of surface department.

<sup>6</sup> Work begun in fiscal year 1900.

TABLE 4.—

| No. of order. | Location.                                                                                      | Pipe sewers laid (length in feet). |        |        | Manholes. | Basins. | Branches. |
|---------------|------------------------------------------------------------------------------------------------|------------------------------------|--------|--------|-----------|---------|-----------|
|               |                                                                                                | 8-in.                              | 12-in. | 24-in. |           |         |           |
| 301           | Square 859.....                                                                                | 29                                 |        |        |           |         |           |
| 302           | E street NW., between Thirteenth and Thirteenth and a half streets.                            |                                    |        |        | 1         |         | 1         |
| 306           | Eleventh and E streets NW.....                                                                 |                                    |        |        | 1         |         |           |
| 311           | First and C streets NE. (southeast corner).....                                                |                                    | 6      |        |           | 1       |           |
| 307           | G and Twenty-sixth streets NW. (intersection).....                                             |                                    |        |        | 1         |         |           |
| 303           | Massachusetts avenue, near Twenty-second street NW. <sup>2</sup> .....                         |                                    |        |        |           |         |           |
| 304           | Pennsylvania avenue NW., between Fourteenth and Fifteenth streets.                             |                                    |        | 168    |           |         |           |
| 305           | Pennsylvania avenue SE., between Tenth and Eleventh streets.                                   |                                    |        |        | 1         |         |           |
| 310           | N and S, alleys in Padsworth.....                                                              |                                    |        |        | 1         |         |           |
| 300           | Rhode Island avenue, between Metropolitan Branch Baltimore and Ohio R. R. and Ninth street NE. |                                    |        | 18     |           | 2       |           |
| 308           | Twenty-fifth street NW., between H and I streets.....                                          |                                    |        |        | 3         |         |           |
|               | Total.....                                                                                     | 29                                 | 6      | 186    | 8         | 3       | 1         |

<sup>2</sup> Paid out of general deposit.

Whole cost.

| Amount of deposit. | Total cost. | Amount returned. | For whom done.                      | Overseer.     | Date of completion. |
|--------------------|-------------|------------------|-------------------------------------|---------------|---------------------|
| \$45.00            | \$33.87     | \$11.13          | Matilda Wilkins .....               | Prince .....  | Sept. 25, 1900      |
| 25.00              | 24.69       | .31              | F. S. Gannon, third vice-president. | Lanigan ..... | Do.                 |
| (1)                | 31.87       | -----            | Anacostia and Potomac R. R. ....    | do .....      | Dec. 22, 1900       |
| (1)                | 57.75       | -----            | Capital Traction Co .....           | do .....      | Apr. 30, 1901       |
| (1)                | 27.34       | -----            | do .....                            | do .....      | Dec. 15, 1900       |
| 20.00              | 16.09       | 3.91             | C. F. Grieshaber .....              | do .....      | Sept. 25, 1900      |
| 740.14             | 740.14      | -----            | Bernard R. Green .....              | Thomas .....  | Mar. 2, 1901        |
| (1)                | 34.05       | -----            | Capital Traction Co .....           | Lanigan ..... | Nov. 24, 1900       |
| 35.00              | 33.17       | 1.83             | A. Loeffler .....                   | do .....      | June 7, 1901        |
| 170.00             | 161.68      | 8.32             | City and Suburban Rwy. Co .....     | do .....      | July 7, 1900        |
| (1)                | 143.86      | -----            | Capital Traction Co .....           | do .....      | Mar. 20, 1901       |
| 1,035.14           | 1,304.51    | 25.50            |                                     |               |                     |

<sup>2</sup> Artificial basin top replaced by bluestone top.

TABLE 5.—*Work done by day labor under the REPLACING OBSTRUCTED SEWERS.*

| Number of order. | Location.                                                            | Pipe sewers laid (length in feet). |          |          |          |          |
|------------------|----------------------------------------------------------------------|------------------------------------|----------|----------|----------|----------|
|                  |                                                                      | 6-inch.                            | 10-inch. | 12-inch. | 15-inch. | 18-inch. |
| 402              | D street NW., between Seventh and Eighth streets.....                | (2)                                |          | 20       |          |          |
| 406              | Eleventh street NW., between K street and Vermont avenue.....        | 63                                 |          | 136      |          |          |
| 420              | Square 870.....                                                      | 66                                 |          | 158      |          |          |
| 400              | Four and a half street SW., between H and I streets.....             | 6                                  |          | 306      |          |          |
| 415              | F street NW., between Second and Third streets.....                  | 69                                 |          | 362      |          |          |
| 401              | K street SW., between Sixth and Seventh streets.....                 | 60                                 |          |          | 500      |          |
| 404              | O street NW., between Fourth and Sixth streets.....                  | 30                                 |          |          |          | 385      |
| 421              | New Jersey avenue SE., between E and Ivy streets.....                | 6                                  |          | 175      |          |          |
| 407              | Prospect street NW., from Potomac eastward.....                      | 39                                 | 305      |          |          |          |
| 414              | P street NW., between Fifteenth and Sixteenth streets.....           | 135                                |          |          |          |          |
| 409              | Rhode Island avenue, between Twelfth street and Vermont avenue.....  | 12                                 |          | 201      |          |          |
| 408              | Rhode Island avenue, between Twelfth street and Vermont avenue.....  | 9                                  |          |          | 87       | 54       |
| 411              | Rhode Island avenue, between Fifth street and New Jersey avenue..... | 15                                 |          | 86       |          |          |
| 403              | Sixth street SW., between K and L streets.....                       | 30                                 |          | 271      |          |          |
| 407              | Twelfth street NW., crossing Rhode Island avenue.....                |                                    |          |          |          | 75       |
| 412              | Square 367.....                                                      | 45                                 |          |          | 284      |          |
| 413              | do.....                                                              | 63                                 |          | 32       |          |          |
| 416              | Thirteenth street SW., between B and D streets.....                  | 39                                 |          |          | 371      |          |
| 419              | Square 342.....                                                      | 3                                  |          | 120      |          |          |
| 422              | Third street SE., between M and N streets.....                       | 45                                 |          | 206      | 45       |          |
| 410              | Vermont avenue from Iowa circle northward.....                       | 9                                  | 97       |          |          |          |
|                  | Total.....                                                           | 744                                | 402      | 2,073    | 1,287    | 514      |

<sup>1</sup> The net cost is determined by deducting the cost of repairs to pavements and cost of connections from the total cost.

<sup>2</sup> Six-inch pipe used in making house connections.

<sup>3</sup> Repairs to pavements were made in fiscal year 1902.

<sup>4</sup> Includes \$29.94 cost of work by plumber.

various sewer appropriations, fiscal year 1901.

REPLACING OBSTRUCTED SEWERS.

| Total relaid. | Connections made. | Manholes. | Branches. | Cost of materials. | Cost of labor.      | Cost of repairs to pavements. | Total cost.      | Cost of connections. | Net cost of sewer. <sup>1</sup> |
|---------------|-------------------|-----------|-----------|--------------------|---------------------|-------------------------------|------------------|----------------------|---------------------------------|
| Feet.<br>20   | -----             | -----     | 1         | \$13.73            | \$25.51             | \$7.17                        | \$46.41          | -----                | \$39.24                         |
| 206           | -----             | 1         | 11        | 94.94              | 409.23              | -----                         | 504.17           | \$42.66              | 461.51                          |
| 235.8         | -----             | -----     | 16        | 88.92              | 381.68              | <sup>3</sup> 14.99            | 485.59           | -----                | 470.60                          |
| 316.8         | -----             | 3         | 15        | 174.04             | <sup>4</sup> 489.21 | 147.52                        | 810.77           | 29.94                | 633.31                          |
| 372.8         | -----             | 3         | 19        | 203.95             | <sup>5</sup> 353.65 | -----                         | ( <sup>6</sup> ) | 10.22                | 547.38                          |
| 498           | 16                | 3         | 19        | 309.22             | 640.73              | 40.93                         | 990.88           | 33.13                | 916.82                          |
| 397           | 7                 | 2         | 8         | 290.07             | <sup>7</sup> 713.60 | 38.99                         | 1,042.66         | 36.41                | 967.26                          |
| 181           | -----             | 1         | 5         | 81.45              | 321.68              | -----                         | 403.13           | ( <sup>8</sup> )     | 403.13                          |
| 304.6         | 8                 | 2         | 13        | 133.54             | 441.47              | 22.42                         | 597.43           | 23.01                | 552.00                          |
| -----         | -----             | -----     | -----     | 17.33              | <sup>9</sup> 125.03 | 6.00                          | 148.45           | -----                | 142.36                          |
| 222.6         | -----             | 1         | 9         | 96.24              | 413.04              | -----                         | 509.28           | -----                | 509.28                          |
| 142           | -----             | 2         | 3         | 116.45             | 314.02              | 33.34                         | 463.81           | -----                | 430.47                          |
| 243           | 4                 | 1         | 8         | 80.40              | 321.29              | -----                         | 401.69           | -----                | 401.69                          |
| 288.9         | 13                | 2         | 11        | 141.59             | 323.67              | 13.34                         | 478.60           | 28.73                | 436.53                          |
| 76.85         | -----             | 1         | -----     | 69.31              | 187.21              | 21.58                         | 278.10           | -----                | 256.52                          |
| 346.2         | 19                | 2         | 19        | 212.77             | 537.70              | 90.19                         | 840.66           | 35.75                | 714.72                          |
| 265.8         | 19                | 2         | 16        | 89.12              | 312.28              | 34.17                         | 439.57           | 37.56                | 363.84                          |
| 498           | 14                | 2         | 19        | 247.11             | 756.79              | 22.92                         | 1,026.82         | -----                | 1,003.90                        |
| 132           | 1                 | 2         | 6         | 82.94              | 246.51              | 47.24                         | 376.69           | -----                | 329.45                          |
| 382           | 9                 | 3         | 7         | 167.74             | 540.53              | -----                         | ( <sup>8</sup> ) | -----                | 708.27                          |
| 99.4          | 4                 | -----     | 5         | 34.35              | 195.27              | -----                         | 229.62           | 17.13                | 212.49                          |
| 5,251.75      | 114               | 33        | 210       | 2,745.21           | 8,050.10            | 544.89                        | 10,174.33        | 294.54               | 10,500.77                       |

<sup>5</sup> Includes \$10.22 cost of work by plumber.

<sup>6</sup> Awaiting bill for repairs to pavements.

<sup>7</sup> Includes \$2.59 cost of work by plumber.

<sup>8</sup> Work completed fiscal year 1902.

<sup>9</sup> Includes \$15.07 cost of work by plumber.

TABLE 6.—Main

| Number of or-<br>der | Location.                                                                                     | Pipe sewers laid (length in feet). |         |          |          |
|----------------------|-----------------------------------------------------------------------------------------------|------------------------------------|---------|----------|----------|
|                      |                                                                                               | 6-inch.                            | 8-inch. | 10-inch. | 12-inch. |
| 544                  | Canal-street property yard                                                                    |                                    |         |          |          |
| 536                  | Bladensburg road at north curb line, N street                                                 |                                    |         |          |          |
| 521                  | Brightwood avenue, between Florida avenue and Pome-<br>roy street                             |                                    |         | 3        |          |
| 534                  | Centre and Fourteenth streets NW. (southwest corner)                                          |                                    |         |          |          |
| 587                  | Cincinnati street NW., just east of Twentieth street                                          |                                    |         |          | 39       |
| 603                  | Canal and South Capitol streets (northwest corner)                                            |                                    |         |          | 12       |
| 651                  | Canal-street property yard                                                                    |                                    |         |          |          |
| 621                  | Connecticut avenue and S street NW. (southwest and<br>southeast corners)                      |                                    |         |          |          |
| 503                  | Delaware avenue SW., between L and M streets (crossing)                                       |                                    |         |          |          |
| 507                  | Delaware avenue and F street (northeast corner) and<br>First and F streets (southwest corner) |                                    |         |          |          |
| 511                  | Delaware avenue SW., between M and N streets                                                  |                                    |         |          |          |
| 514                  | Delaware avenue and M street SW. (northwest corner)                                           |                                    |         |          | 39       |
| 515                  | Delaware avenue SW., between M and N streets                                                  |                                    |         |          | 42       |
| 539                  | Dartmouth and Eleventh streets NW. (northwest corner)                                         |                                    |         |          | 33       |
| 512                  | Eighth and L streets NE. (northeast corner)                                                   |                                    |         |          | 15       |
| 558                  | Eighteenth street and Howard avenue (northwest<br>corner)                                     |                                    |         |          | 24       |
| 560                  | Eighteenth and H streets NW. (southeast corner)                                               |                                    |         |          |          |
| 562                  | Eighth and E streets NE. (southeast corner)                                                   |                                    |         |          |          |
| 563                  | Eighth and F streets NE. (southwest corner)                                                   |                                    |         |          |          |
| 574                  | Eighteenth and C streets NW. (northwest corner)                                               |                                    |         |          |          |
| 585                  | Eleventh street SE., at Virginia avenue                                                       |                                    | 66      |          |          |
| 591                  | Eighteenth street and Kenesaw avenue                                                          |                                    |         |          |          |
| 594                  | Eighteenth street NW., just north of Columbia road                                            |                                    |         | 39       |          |
| 612                  | Eighteenth street and Howard avenue NW.                                                       |                                    |         |          |          |
| 623                  | Eighteenth street and Florida avenue NW. (southwest<br>corner)                                |                                    |         |          |          |
| 626                  | Eslin and Lamar streets NW. (southwest and southeast<br>corners)                              |                                    |         |          | 42       |
| 637                  | Eighth street SW., between I and K streets                                                    |                                    |         |          | 15       |
| 508                  | Fifth and L streets NE. (northeast corner)                                                    |                                    |         |          | 6        |
| 509                  | Fourth and L streets NE. (northeast corner)                                                   |                                    |         |          | 9        |
| 520                  | First and O streets NE. (northwest corner)                                                    |                                    |         |          | 15       |
| 535                  | First and V streets NW. (southeast corner)                                                    |                                    |         |          | 42       |
| 547                  | First and L streets SE. (northeast corner)                                                    |                                    |         |          |          |
| 549                  | First and L streets SE. (northwest and southwest cor-<br>ners)                                |                                    |         | 78       | 66       |
| 551                  | Fourteenth and G streets NW. (southwest corner)                                               |                                    |         |          |          |
| 556                  | First and I streets SW. (southeast corner)                                                    |                                    |         |          |          |
| 561                  | Fifth street NE., between I and K streets                                                     |                                    |         | 21       |          |
| 564                  | Fifth and F streets NE. (southwest corner)                                                    |                                    |         |          |          |
| 583                  | Florida avenue and right of way of B. & O. R. R. (north-<br>west corner)                      |                                    |         |          |          |
| 503                  | Fourteenth and Binney streets                                                                 |                                    |         | 9        |          |
| 602                  | Square 514                                                                                    |                                    |         |          | 113      |
| 609                  | Flagler place NW., between U and W streets                                                    |                                    |         | 111      |          |
| 617                  | Fourth and W streets NE. (northeast and northwest<br>corners)                                 |                                    |         |          | 9        |
| 620                  | Fifteenth and D streets SE. (northwest and northeast<br>corners)                              |                                    |         | 60       |          |
| 622                  | Florida and California avenues NW. (northwest corner)                                         |                                    |         |          |          |
| 624                  | Florida avenue and Seventeenth street NW. (southeast<br>corner)                               |                                    |         |          |          |
| 625                  | Florida avenue, 100 feet west of Sixteenth street NW.                                         |                                    |         |          |          |
| 628                  | Fourteenth street NW., between G street and New<br>York avenue                                |                                    |         |          |          |
| 629                  | Florida and New Hampshire avenues NW. (southwest<br>corner)                                   |                                    |         |          |          |
| 630                  | Florida avenue and S street NW. (southeast corner)                                            |                                    |         |          |          |
| 633                  | Florida and Ontario avenues NW. (northwest corner)                                            |                                    |         |          | 137      |
| 638                  | Fifth street SE., from Virginia avenue northward.                                             |                                    |         |          |          |
| 641                  | Florida avenue, just east of Washington Branch B. & O.<br>R. R.                               |                                    |         |          |          |
| 660                  | Fourteenth street NW., between G street and New<br>York avenue                                |                                    |         |          |          |
| 661                  | Fifteenth and B streets NE. (southwest corner)                                                |                                    |         |          |          |
| 662                  | Fifteenth and B streets NE. (southeast corner)                                                |                                    |         |          |          |
| 627                  | G street, crossing Fourteenth street NW.                                                      |                                    |         |          |          |
| 658                  | G street and New Hampshire avenue NW. (northeast<br>corner)                                   |                                    |         |          | 18       |

<sup>1</sup> Constructing artificial basin tops (51 corner and 82 side tops).

<sup>2</sup> Constructing shed for making and storing artificial basin tops. One half the cost of this work was charged to the appropriation for cleaning and repairing sewers and basins, and repaid to the appropriation for main and pipe sewers.

ana pipe sewers.

| Pipe sewers laid (length in feet). |          |          |          | Gutter inlet. | Manholes. | Basins. | Branches. | Cost of materials. | Cost of labor.    | Cost of repairs to pavements. | Total cost.                    |
|------------------------------------|----------|----------|----------|---------------|-----------|---------|-----------|--------------------|-------------------|-------------------------------|--------------------------------|
| 15-inch.                           | 18-inch. | 21-inch. | 24-inch. |               |           |         |           |                    |                   |                               |                                |
| 12                                 |          |          |          |               |           | 1       |           | \$340.01<br>28.96  | \$281.20<br>27.77 |                               | <sup>1</sup> \$621.21<br>56.73 |
|                                    | 18       |          |          |               |           | 1       |           | 25.45              | 26.97             |                               | 52.42                          |
|                                    |          |          |          |               |           | 1       |           | 37.14              | 30.03             |                               | 67.17                          |
|                                    |          |          |          |               |           | 1       |           | 38.15              | 41.91             |                               | 80.06                          |
|                                    |          |          |          |               |           | 1       |           | 29.68              | 29.46             |                               | 59.14                          |
|                                    |          |          |          |               |           |         |           | 93.18              | 20.06             |                               | <sup>2</sup> 113.24            |
| 84                                 | 126      |          |          |               |           | 2       |           | 86.48<br>77.14     | 122.55<br>131.55  | \$27.25                       | 236.28<br>208.69               |
| 36                                 | 315      |          |          |               | 1         | 2       |           | 67.63<br>201.84    | 66.77<br>270.65   | 3.84                          | 138.24<br>472.49               |
|                                    |          |          |          |               |           | 1       |           | 30.57              | 40.21             |                               | 70.78                          |
|                                    |          |          |          |               |           | 2       |           | 54.11              | 62.18             |                               | 116.29                         |
|                                    |          |          |          |               |           | 1       |           | 39.76              | 48.08             |                               | 87.84                          |
|                                    |          |          |          |               |           | 1       |           | 31.01              | 34.35             |                               | 65.36                          |
|                                    |          |          |          |               |           | 1       |           | 34.21              | 43.08             |                               | 77.29                          |
| 24                                 |          |          |          |               |           | 1       |           | 35.16              | 45.11             |                               | 80.27                          |
|                                    |          |          |          |               |           | 1       |           | 25.84              | 25.68             | 2.62                          | 54.15                          |
| 21                                 |          |          |          |               |           | 1       |           | 33.99              | 38.15             |                               | 72.14                          |
| 42                                 |          |          |          |               |           | 1       |           | 44.65              | 43.10             |                               | 87.75                          |
|                                    |          |          |          |               |           |         |           | 11.35              | 40.88             | 2.10                          | 54.33                          |
| 48                                 |          |          |          |               |           | 2       |           | 73.47              | 69.52             |                               | 142.99                         |
|                                    |          |          |          |               | 1         | 1       |           | 51.59              | 53.33             |                               | 104.92                         |
| 21                                 |          |          |          |               |           | 1       |           | 33.44              | 38.77             |                               | 72.21                          |
| 12                                 |          |          |          |               |           | 1       |           | 31.15              | 30.16             | 1.53                          | 62.84                          |
|                                    |          |          |          |               |           | 2       |           | 66.48              | 68.97             |                               | 135.45                         |
| 265                                | 45       |          |          |               | 2         | 2       |           | 196.06             | 285.02            | 41.12                         | 522.20                         |
|                                    |          |          |          |               |           | 1       |           | 29.71              | 36.45             |                               | 66.16                          |
|                                    |          |          |          |               |           | 1       |           | 26.93              | 27.08             | 2.51                          | 56.32                          |
|                                    |          |          |          |               |           | 1       |           | 28.26              | 26.79             |                               | 55.05                          |
|                                    |          |          |          |               |           | 1       |           | 30.41              | 25.65             |                               | 56.06                          |
|                                    |          |          |          |               |           | 1       |           | 37.03              | 40.69             |                               | 77.72                          |
|                                    |          |          |          |               |           | 2       |           | 71.12              | 72.16             |                               | 143.28                         |
| 6                                  |          |          |          |               |           | 1       |           | 44.99              | 61.57             | 13.68                         | 120.24                         |
|                                    |          |          |          |               |           | 1       |           | 28.22              | 22.30             |                               | 50.61                          |
| 6                                  |          |          |          |               |           | 1       |           | 31.50              | 25.97             |                               | 57.47                          |
|                                    |          |          |          |               |           | 1       |           | 28.72              | 28.61             | 9.16                          | 66.49                          |
|                                    |          | 39       |          |               |           | 1       |           | 63.83              | 77.20             |                               | 141.03                         |
| 66                                 |          |          |          |               | 2         | 1       |           | 91.57              | 105.75            | 33.37                         | 230.69                         |
|                                    |          |          |          |               | 1         |         |           | 59.28              | 204.70            | 18.43                         | 282.41                         |
|                                    |          |          |          |               |           | 6       | 4         | 187.10             | 159.51            |                               | 346.61                         |
|                                    |          |          |          |               |           | 2       |           | 54.29              | 47.10             |                               | 101.39                         |
|                                    |          |          |          |               |           | 2       |           | 68.18              | 97.72             |                               | 165.90                         |
| 51                                 |          |          |          |               |           | 1       |           | 48.15              | 59.99             |                               | 108.14                         |
| 6                                  |          |          |          |               |           | 1       |           | 25.59              | 34.50             |                               | 60.09                          |
| 6                                  |          |          |          |               |           | 1       |           | 27.43              | 35.87             |                               | 63.30                          |
| 166                                |          |          |          |               |           |         | 5         | 77.91              | \$290.10          | 96.28                         | 464.20                         |
| 21                                 |          |          |          |               |           | 1       |           | 34.72              | 36.81             |                               | 71.53                          |
| 12                                 |          |          |          |               |           | 1       |           | 30.64              | 33.78             | 9.59                          | 74.01                          |
| 51                                 |          |          |          |               |           | 1       |           | 46.73              | 63.38             |                               | 110.11                         |
|                                    |          |          |          |               | 1         |         |           | 65.66              | 133.87            | 3.45                          | 202.98                         |
|                                    |          |          |          |               |           | 2       |           | 101.31             | 89.79             |                               | 191.10                         |
| 126                                |          |          | 51       |               |           |         |           | 104.54             | 184.03            | 72.92                         | 361.49                         |
| 18                                 |          |          |          |               | 2         |         |           | 33.29              | 26.44             |                               | 59.73                          |
| 18                                 |          |          |          |               |           | 1       |           | 32.37              | 25.57             |                               | 57.94                          |
|                                    |          |          |          |               | 1         |         |           | 68.09              | 145.62            | 21.75                         | 235.46                         |
|                                    |          |          | 39       |               |           |         |           |                    |                   |                               |                                |
|                                    |          |          |          |               |           | 1       |           | 31.31              | 39.64             |                               | 70.95                          |

<sup>2</sup> Includes \$12.03, cost of work by plumber.

TABLE 6.—Main and pipe

| Number of order. | Location.                                                                            | Pipe sewers laid (length in feet). |         |          |          |
|------------------|--------------------------------------------------------------------------------------|------------------------------------|---------|----------|----------|
|                  |                                                                                      | 6-inch.                            | 8-inch. | 10-inch. | 12-inch. |
| 554              | Half and N streets SE. (northwest corner)                                            |                                    |         |          | 9        |
| 555              | Half and H streets SW. (southeast and southwest corners)                             |                                    |         |          |          |
| 557              | Half and M streets SW. (southeast corner)                                            |                                    |         | 69       | 15       |
| 600              | H street between Water and Ninth streets SW                                          |                                    |         |          | 42       |
| 643              | Half street SW., from N street southward                                             |                                    |         |          | 66       |
| 644              | Half street SE., between M and N streets                                             |                                    |         |          |          |
| 645              | H street SW., between Half and First streets                                         |                                    |         | 134      |          |
| 559              | Ingleside terrace between Eighteenth and Nineteenth streets                          |                                    |         |          | 42       |
| 604              | Ivy street, just east of South Capital street                                        |                                    |         |          | 39       |
| 538              | King and Trinidad streets NE. (northeast and northwest corners)                      |                                    |         |          |          |
| 590              | Kenesaw avenue at Seventeenth street NW                                              |                                    |         |          |          |
| 657              | K street and L'Enfant circle SE.                                                     |                                    |         |          | 30       |
| 537              | Levis and Trinidad streets NE. (northeast corner)                                    |                                    |         |          |          |
| 552              | L street and west roadway Canal street SE. (northeast corner)                        |                                    | 38      |          |          |
| 584              | L street NE., between Ninth and Tenth streets                                        |                                    |         |          |          |
| 599              | L street SE., between Eighth and Ninth streets                                       |                                    |         |          | 48       |
| 611              | L street SW., between Half street and James Creek Canal                              |                                    |         |          |          |
| 614              | L street SW., between South Capitol and Half streets                                 |                                    |         |          |          |
| 616              | L street SE., between Half and South Capitol streets                                 |                                    |         |          |          |
| 618              | do                                                                                   |                                    |         |          | 51       |
| 632              | L street NW., between Twentieth and Twenty-first streets                             | 48                                 |         | 139      | 222      |
| 639              | L street SE., between Half and First streets                                         |                                    |         | 6        | 180      |
| 642              | do                                                                                   |                                    |         |          | 107      |
| 667              | Le Droit avenue, between Seaton and Thomas streets                                   |                                    |         |          |          |
| 533              | M street NW., between Fourteenth and Fifteenth streets                               |                                    |         | 78       |          |
| 659              | Michigan avenue at North Capitol street                                              |                                    |         | 6        |          |
| 540              | Ninth and D streets NE. (northeast corner)                                           |                                    |         |          | 3        |
| 548              | New Jersey avenue and L street SE. (northwest, southwest, and northeast corners)     |                                    |         |          | 27       |
| 565              | Ninth and Quincy streets NW. (southeast corner)                                      |                                    |         |          | 60       |
| 575              | Nineteenth and C streets NW. (northeast corner)                                      |                                    |         |          |          |
| 576              | Nineteenth and D streets NW. (northwest corner)                                      |                                    |         |          |          |
| 588              | Nineteenth street, just south of Cincinnati street                                   |                                    |         | 72       |          |
| 596              | Ninth and K streets NE. (northeast corner)                                           |                                    |         |          | 18       |
| 597              | Ninth and K streets NE. (northwest corner)                                           |                                    |         |          | 18       |
| 619              | N street NW., between Nineteenth and Twentieth streets                               |                                    | 63      |          |          |
| 631              | Nineteenth street and Florida avenue NW. (southeast corner)                          |                                    |         |          |          |
| 665              | Oak and Fourth streets NW. (northeast corner)                                        |                                    |         |          | 12       |
| 668              | N street NW., between Seventeenth and Eighteenth streets                             |                                    |         |          |          |
| 522              | Pomeroy street and Brightwood avenue NW. (northeast corner)                          |                                    |         | 12       |          |
| 529              | Pennsylvania avenue NW., between Sixth and Seventh streets                           |                                    |         |          | 30       |
| 615              | P street NW., from Twenty-third street westward                                      |                                    |         |          |          |
| 646              | Pennsylvania avenue SE., crossing Fifteenth street                                   |                                    |         |          |          |
| 654              | South roadway of Pennsylvania avenue and Twelfth street SE. (northwest corner)       |                                    |         | 21       |          |
| 655              | Pennsylvania avenue and Twelfth street SE. (southwest corner)                        |                                    |         |          |          |
| 640              | Q street NW., just east of First street                                              |                                    |         | 18       |          |
| 502              | Crossing Rhode Island avenue and Seventeenth street (north and west sides)           |                                    |         |          |          |
| 532              | Crossing Rhode Island avenue between Fifteenth and Sixteenth streets and square 195  |                                    |         |          | 85       |
| 601              | Crossing Rhode Island avenue and R street, between Seventh and Marion and square 444 |                                    |         | 3        | 51       |
| 610              | R street NW., between Nineteenth and Twentieth streets                               | 30                                 |         |          |          |
| 647              | R street NW., crossing Seventeenth street                                            |                                    |         |          | 24       |
| 648              | R street NW., between Sixteenth and Seventeenth streets                              |                                    |         |          |          |
| 649              | R street NW., crossing Sixteenth street                                              |                                    |         |          | 449      |
| 650              | R street NW., between Fifteenth and Sixteenth streets                                |                                    |         |          |          |
| 500              | Seventeenth street NW., between M street and Rhode Island avenue                     |                                    |         |          |          |
| 501              | Second street SW., between L and M streets                                           |                                    |         |          |          |
| 513              | South Capitol and K streets SE. (northeast corner)                                   |                                    |         | 15       |          |
| 517              | S street NW., between Thirty-fourth and Thirty-fifth streets                         |                                    |         | 21       |          |

<sup>1</sup> Work completed in fiscal year 1902.<sup>2</sup> Awaiting bill for repairs to pavements.<sup>3</sup> Includes \$9.97, cost of work by plumber.



SEWERS—Continued.

| Pipe sewers laid (length in feet). |          |          |          | Gutter inlet. | Manholes. | Basins. | Branches. | Cost of materials. | Cost of labor. | Cost of repairs to pavements. | Total cost. |
|------------------------------------|----------|----------|----------|---------------|-----------|---------|-----------|--------------------|----------------|-------------------------------|-------------|
| 15-inch.                           | 18-inch. | 21-inch. | 24-inch. |               |           |         |           |                    |                |                               |             |
|                                    |          |          |          |               |           | 1       |           | \$26.43            | \$22.06        |                               | \$48.49     |
|                                    |          |          |          |               |           | 2       |           | 67.61              | 65.38          |                               | 132.99      |
|                                    |          |          |          |               |           | 1       |           | 29.69              | 26.26          |                               | 55.95       |
|                                    |          |          |          |               | 1         |         |           | 30.21              | 46.77          | \$3.44                        | 80.42       |
|                                    |          |          |          |               | 1         |         |           | 38.63              | 37.92          |                               | 76.55       |
| 180                                |          |          |          |               | 1         |         |           | 103.44             | 178.72         |                               | 282.16      |
|                                    |          |          |          |               | 1         |         | 1         | 53.37              | 73.25          | 12.57                         | 139.19      |
|                                    |          |          |          |               |           | 1       |           | 39.48              | 42.81          |                               | 82.29       |
|                                    |          |          |          |               |           | 1       |           | 37.45              | 42.08          |                               | 79.53       |
|                                    |          |          |          |               |           | 2       |           | 65.70              | 51.58          |                               | 117.28      |
| 30                                 |          |          |          |               |           | 2       |           | 62.62              | 55.44          |                               | 118.06      |
| 24                                 |          |          |          |               |           | 1       |           | 38.75              | 28.29          |                               | 67.04       |
| 24                                 |          |          |          |               |           | 1       |           | 36.60              | 27.57          |                               | 64.17       |
|                                    |          |          |          |               |           | 1       |           | 25.48              | 31.72          |                               | 57.20       |
|                                    |          |          | 27       |               |           | 1       |           | 69.39              | 85.27          |                               | 154.66      |
|                                    |          |          |          |               | 1         |         | 3         | 37.95              | 60.29          |                               | 98.24       |
|                                    |          | 381      | 99       |               | 1         |         |           | 124.91             | 147.21         |                               | 272.12      |
|                                    |          |          |          |               | 1         |         |           | 316.93             | 488.03         |                               | 804.96      |
|                                    | 210      |          |          |               | 1         |         |           | 142.66             | 267.51         |                               | 410.17      |
|                                    |          |          |          |               | 1         |         |           | 37.77              | 65.42          | 9.35                          | 112.54      |
|                                    |          | 30       |          |               | 3         |         | 23        | 230.62             | 547.96         | 54.41                         | 832.99      |
|                                    |          |          |          |               |           |         |           | 63.60              | 124.02         | 5.51                          | 193.22      |
|                                    |          |          |          |               |           |         | 1         | 39.19              | 62.44          |                               | 101.63      |
|                                    |          |          |          |               |           | 1       |           | 26.16              | 25.97          |                               | 52.13       |
|                                    |          |          |          |               | 1         |         | 3         | 37.21              | 82.80          | 7.63                          | 127.64      |
|                                    |          |          |          |               |           | 1       |           | 26.52              | 25.63          |                               | 52.15       |
|                                    |          |          |          |               |           | 1       |           | 24.60              | 28.15          |                               | 52.75       |
|                                    |          |          |          |               |           | 3       |           | 82.62              | 82.12          |                               | 164.74      |
|                                    |          |          |          |               | 1         |         |           | 45.76              | 40.80          |                               | 86.56       |
| 42                                 |          |          |          |               | 1         |         |           | 44.44              | 36.38          |                               | 80.82       |
| 42                                 |          |          |          |               | 1         |         |           | 45.09              | 56.07          |                               | 101.16      |
|                                    |          |          |          |               | 1         |         |           | 43.21              | 54.98          |                               | 98.14       |
|                                    |          |          |          |               | 1         |         |           | 32.67              | 28.06          |                               | 60.73       |
|                                    |          |          |          |               | 1         |         |           | 31.96              | 24.69          |                               | 56.65       |
|                                    |          |          |          |               | 1         |         | 3         | 32.67              | 49.28          |                               | 81.95       |
| 15                                 |          |          |          |               |           | 1       |           | 31.51              | 34.16          |                               | 65.67       |
|                                    |          |          |          |               |           | 1       |           | 30.58              | 27.75          | (2)                           |             |
|                                    | 24       |          |          |               |           |         |           | 16.91              | 100.54         |                               | 117.45      |
|                                    |          |          |          |               |           | 1       |           | 29.27              | 31.47          |                               | 60.74       |
|                                    |          |          |          |               |           | 1       |           | 34.27              | 36.50          | 8.01                          | 78.78       |
| 236                                | 360      |          |          |               | 2         |         | 1         | 353.32             | 734.24         | 31.55                         | 1,119.11    |
| 66                                 |          |          |          |               | 1         |         |           | 53.80              | 71.99          | 4.87                          | 130.66      |
|                                    |          |          |          |               |           | 1       |           | 22.90              | 26.58          |                               | 49.48       |
|                                    |          |          |          |               |           | 1       |           | 30.46              | 33.12          |                               | 63.58       |
|                                    |          |          |          |               |           | 1       |           | 30.18              | 29.04          |                               | 59.22       |
|                                    | 57       | 78       |          |               | 2         |         |           | 131.60             | 265.64         | 44.45                         | 441.69      |
| 84                                 |          |          |          |               | 1         |         | 2         | 87.91              | 322.97         | 82.19                         | 493.07      |
| 197                                | 96       | 30       |          |               | 4         | 1       | 12        | 297.39             | 610.15         | 70.77                         | 978.31      |
|                                    | 221      | 113      |          |               | 3         |         | 5         | 300.22             | 633.65         | 9.49                          | 943.36      |
|                                    |          |          | 39       |               | 1         |         |           | 65.65              | 101.12         | 11.84                         | 178.62      |
|                                    |          | 460      |          |               | 2         |         | 8         | 430.75             | 872.72         |                               | 1,303.47    |
|                                    | 90       |          |          |               | 1         |         |           | 72.28              | 167.19         | 25.76                         | 265.23      |
|                                    |          |          |          |               | 2         |         | 10        | 199.40             | 542.34         | 43.99                         | 785.73      |
|                                    |          |          | 252      |               | 1         |         |           | 269.23             | 492.95         |                               | 762.18      |
|                                    |          | 267      |          |               | 1         |         |           | 236.33             | 292.08         | 97                            | 529.38      |
|                                    |          |          |          |               |           | 1       |           | 29.00              | 26.48          |                               | 55.48       |
|                                    |          |          |          |               |           | 1       |           | 24.68              | 23.32          |                               | 48.00       |

<sup>1</sup> Includes \$44.60, cost of work by plumber.<sup>2</sup> Includes \$77.10, cost of work by plumber.

TABLE 6.—Main and pipe

| Number of order. | Location.                                                                                                 | Pipe sewers laid (length in feet). |         |          |          |
|------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------|---------|----------|----------|
|                  |                                                                                                           | 6-inch.                            | 8-inch. | 10-inch. | 12-inch. |
| 519              | Seventh and Acker streets NE. (southwest corner).....                                                     | -----                              | -----   | 15       | -----    |
| 520              | Seventh street and Louisiana avenue NW. (northeast and southeast corners).....                            | -----                              | -----   | 15       | 69       |
| 531              | Seventh street and Pennsylvania avenue NW. (northeast corner).....                                        | 6                                  | -----   | -----    | -----    |
| 545              | South Capitol and L streets SE. (southeast corner).....                                                   | -----                              | -----   | -----    | 9        |
| 605              | South Capitol and Canal streets (northeast corner).....                                                   | -----                              | -----   | -----    | -----    |
| 613              | S street NW., just west of Phelps place.....                                                              | -----                              | -----   | 39       | -----    |
| 635              | Second street SE., between I and K streets.....                                                           | -----                              | -----   | 81       | -----    |
| 506              | Sixth and E streets NE. (northeast corner).....                                                           | -----                              | -----   | -----    | 18       |
| 518              | Sixth and Acker streets NE. (southeast corner).....                                                       | -----                              | -----   | -----    | 18       |
| 523              | Sixth and Callan streets NE. (northeast corner).....                                                      | -----                              | -----   | 9        | -----    |
| 524              | Superior street and Champlain avenue (southeast corner).....                                              | -----                              | -----   | -----    | -----    |
| 525              | Superior street and Ontario avenue (northeast corner).....                                                | -----                              | -----   | -----    | -----    |
| 526              | Superior and Meridian streets (northwest corner).....                                                     | -----                              | -----   | -----    | -----    |
| 527              | Superior street and Central avenue (southeast and northwest corners).....                                 | -----                              | -----   | -----    | -----    |
| 506              | Sixth and E streets NE. (southeast corner).....                                                           | -----                              | -----   | -----    | -----    |
| 507              | Sixth and F streets NE. (southwest corner).....                                                           | -----                              | -----   | -----    | -----    |
| 636              | Sixteenth street NW., just north of Florida avenue.....                                                   | -----                              | -----   | -----    | -----    |
| 504              | Thirty-seventh street and Prospect avenue NW.....                                                         | -----                              | -----   | -----    | 33       |
| 505              | Twelfth and H streets NE. (northeast and northwest corners).....                                          | -----                              | -----   | -----    | 63       |
| 510              | Third and L streets NE. (northeast corner).....                                                           | -----                              | -----   | -----    | 18       |
| 516              | Third and P streets NW. (northwest corner).....                                                           | -----                              | -----   | 3        | -----    |
| 528              | Square 1010.....                                                                                          | -----                              | -----   | -----    | 104      |
| 541              | Twelfth and D streets NE. (northwest and southeast corners).....                                          | -----                              | -----   | 9        | -----    |
| 542              | Thirteenth and D streets NE. (northwest and southeast corners).....                                       | -----                              | -----   | 48       | -----    |
| 543              | Tenth and D streets NE. (southwest and northeast corners).....                                            | -----                              | -----   | 45       | -----    |
| 546              | Square 1209.....                                                                                          | -----                              | -----   | 6        | -----    |
| 553              | Square 1005.....                                                                                          | -----                              | 8       | -----    | -----    |
| 569              | Twenty-second street and New York avenue NW. (northeast corner).....                                      | -----                              | -----   | -----    | 9        |
| 570              | Twenty-second and D streets NW. (northeast corner).....                                                   | -----                              | -----   | -----    | 9        |
| 571              | Twenty-second and D streets NW. (northwest corner).....                                                   | -----                              | -----   | 30       | -----    |
| 572              | Twenty-second and E streets NW. (northwest corner).....                                                   | -----                              | -----   | -----    | 3        |
| 573              | Twenty-second street and New York avenue (northwest corner).....                                          | -----                              | -----   | -----    | 30       |
| 577              | Twentieth and D streets NW. (northeast corner).....                                                       | -----                              | -----   | -----    | -----    |
| 578              | Twentieth street and New York avenue NW. (northeast and northwest corners).....                           | -----                              | -----   | -----    | 81       |
| 580              | Twenty-first street and New York avenue NW. (northwest, northeast, southwest, and southeast corners)..... | -----                              | -----   | -----    | -----    |
| 581              | Twenty-third street and New York avenue NW. (northeast corner).....                                       | -----                              | -----   | -----    | -----    |
| 589              | Twenty-second and P streets NW. (northeast and southeast corners).....                                    | -----                              | -----   | -----    | -----    |
| 592              | Twenty-sixth street, between Water and D streets.....                                                     | -----                              | -----   | -----    | -----    |
| 595              | Square 378.....                                                                                           | -----                              | -----   | -----    | -----    |
| 598              | Twenty-ninth street NW., between O and P streets.....                                                     | -----                              | -----   | -----    | 12       |
| 606              | North roadway Pennsylvania avenue and Twelfth street SE. (southwest corner).....                          | -----                              | -----   | 12       | -----    |
| 607              | North roadway Pennsylvania avenue and Twelfth street SE. (southeast corner).....                          | -----                              | -----   | 66       | -----    |
| 608              | North roadway Pennsylvania avenue and Thirteenth street SE. (southwest corner).....                       | -----                              | -----   | 63       | -----    |
| 634              | Twentieth and Baltimore streets NW. (intersection).....                                                   | -----                              | -----   | 111      | -----    |
| 664              | U street NW., at Flagler place.....                                                                       | -----                              | -----   | -----    | 18       |
| 530              | Vermont avenue and O street NW.....                                                                       | -----                              | -----   | 48       | -----    |
| 568              | North curb Virginia avenue and south curb G street NW. (intersection).....                                | -----                              | -----   | -----    | 6        |
| 579              | Virginia and New York avenues NW. (northeast and northwest corners).....                                  | -----                              | -----   | -----    | 78       |
| 586              | Virginia avenue crossing, near intersection Twenty-third street.....                                      | -----                              | -----   | -----    | 84       |
| 582              | W street NW., between Florida avenue and Fifteenth street.....                                            | -----                              | -----   | -----    | 12       |
| 656              | Whitney avenue, between Thirteenth and Fourteenth streets.....                                            | -----                              | -----   | 48       | -----    |
|                  | Total.....                                                                                                | 84                                 | 175     | 1,563    | 3,044    |

<sup>1</sup> Awaiting bill for repairs to pavements.

80000 - Continued.

| Pipe sewers laid (length in feet). |          |          |          | Gutter inlet. | Manholes. | Basins. | Branches. | Cost of materials. | Cost of labor.      | Cost of repairs to pavements. | Total cost. |
|------------------------------------|----------|----------|----------|---------------|-----------|---------|-----------|--------------------|---------------------|-------------------------------|-------------|
| 15-inch.                           | 18-inch. | 21-inch. | 24-inch. |               |           |         |           |                    |                     |                               |             |
|                                    |          |          |          |               |           | 1       |           | \$29.57            | \$25.95             |                               | \$55.52     |
|                                    |          |          |          |               |           | 2       |           | 65.08              | 86.05               | \$29.70                       | 180.83      |
|                                    |          |          |          |               |           | 1       |           | 21.36              | 24.04               |                               | 45.40       |
|                                    |          |          |          |               |           | 1       |           | 27.14              | 24.07               |                               | 51.21       |
| 15                                 |          |          |          |               |           | 1       |           | 31.36              | 33.64               |                               | 65.00       |
|                                    |          |          |          |               |           | 2       |           | 61.79              | 56.72               |                               | 118.51      |
|                                    |          |          |          |               |           | 1       |           | 41.83              | 52.74               |                               | 94.57       |
|                                    |          |          |          |               |           | 1       |           | 31.91              | 41.35               |                               | 73.26       |
|                                    |          |          |          |               |           | 1       |           | 51.23              | 26.97               |                               | 58.20       |
|                                    |          |          |          |               |           | 1       |           | 27.80              | 25.11               |                               | 52.91       |
| 21                                 |          |          |          |               |           | 1       |           | 35.48              | 35.30               |                               | 70.78       |
| 30                                 |          |          |          |               |           | 1       |           | 42.90              | 34.18               |                               | 77.08       |
| 9                                  |          |          |          |               | 1         | 1       |           | 54.33              | 45.73               |                               | 100.06      |
|                                    |          |          |          |               | 1         | 2       |           | 88.99              | 70.32               |                               | 159.31      |
| 42                                 |          |          |          |               |           | 1       |           | 29.42              | 24.00               | 2.10                          | 52.52       |
| 12                                 |          |          |          |               |           | 1       |           | 29.33              | 29.43               |                               | 58.76       |
|                                    |          |          |          | 39            |           |         |           | 51.46              | 74.76               |                               | 126.22      |
|                                    |          |          |          |               |           | 1       |           | 36.97              | 46.20               |                               | 83.17       |
|                                    |          |          |          |               |           | 2       |           | 69.77              | 89.70               | 15.72                         | 175.19      |
|                                    |          |          |          |               |           | 1       |           | 31.78              | 31.17               |                               | 62.95       |
|                                    |          |          |          |               |           | 1       |           | 25.74              | 22.73               |                               | 48.47       |
|                                    | 36       |          |          |               | 2         |         | 1         | 96.93              | 172.10              | 1.64                          | 270.67      |
|                                    |          |          |          |               |           | 2       |           | 51.23              | 39.56               |                               | 90.79       |
|                                    |          |          |          |               |           | 2       |           | 60.46              | 53.85               |                               | 114.31      |
|                                    |          |          |          |               |           | 2       |           | 59.87              | 64.96               |                               | 124.83      |
|                                    |          |          |          |               |           | 1       |           | 18.31              | 17.40               |                               | 35.71       |
|                                    |          |          |          |               |           |         | 1         | 2.12               | 6.24                | 3.91                          | 12.27       |
|                                    |          |          |          |               |           | 1       |           | 28.26              | 27.69               |                               | 55.95       |
|                                    |          |          |          |               |           | 1       |           | 28.55              | 29.43               |                               | 57.98       |
|                                    |          |          |          |               |           | 1       |           | 32.89              | 38.35               |                               | 71.24       |
|                                    |          |          |          |               |           | 1       |           | 26.43              | 30.19               |                               | 56.62       |
|                                    |          |          |          |               |           | 1       |           | 34.79              | 34.02               |                               | 68.81       |
| 45                                 |          |          |          |               |           | 1       |           | 45.86              | 39.35               |                               | 85.21       |
| 66                                 |          |          |          |               |           | 2       |           | 70.43              | 51.57               |                               | 122.00      |
|                                    |          |          |          |               |           | 4       |           | 122.72             | 98.72               |                               | 221.44      |
| 18                                 |          |          |          |               |           | 1       |           | 34.23              | 28.52               |                               | 62.75       |
|                                    |          |          |          |               |           | 2       |           | 50.58              | 56.45               | 33.08                         | 140.11      |
|                                    |          |          |          |               |           |         |           | 6.93               | <sup>1</sup> 24.61  |                               |             |
| 119                                |          |          |          |               | 1         |         | 4         | 74.26              | 104.09              | 93.75                         | 272.10      |
| 24                                 | 340      |          |          |               | 3         |         | 8         | 280.00             | <sup>2</sup> 506.21 | 84.02                         | 870.23      |
|                                    |          |          |          |               | 1         | 1       |           | 52.59              | 52.95               |                               | 105.54      |
|                                    |          |          |          |               |           | 1       |           | 42.06              | 51.48               |                               | 93.54       |
|                                    |          |          |          |               |           | 1       |           | 41.62              | 50.81               |                               | 92.43       |
|                                    | 72       |          |          |               | 1         | 4       |           | 196.64             | 241.75              |                               | 438.39      |
|                                    |          |          |          |               |           | 1       |           | 32.27              | 28.78               | 10.69                         | 71.74       |
|                                    |          |          |          |               |           | 1       |           | 37.64              | 59.74               | 19.32                         | 116.70      |
|                                    |          |          |          |               |           | 1       |           | 27.42              | 24.34               |                               | 51.76       |
|                                    |          |          |          |               |           | 2       |           | 72.89              | 65.05               |                               | 137.94      |
|                                    |          |          |          |               |           | 1       |           | 48.55              | 162.10              | 30.40                         | 241.05      |
|                                    |          |          |          |               |           | 1       |           | 31.36              | 27.43               |                               | 58.79       |
|                                    |          |          |          |               |           | 1       |           | 32.31              | 32.07               |                               | 64.38       |
| 2,044                              | 2,010    | 1,368    | 546      | 39            | 55        | 157     | 97        | 10,998.95          | 15,983.09           | 1,110.54                      | 28,002.71   |

<sup>2</sup> Includes \$9.95, cost of work by plumber.

TABLE 7.—*Sub*

| No.<br>of<br>order. | Location.                                                                             | Pipe sewers laid<br>(length in feet). |          |          |
|---------------------|---------------------------------------------------------------------------------------|---------------------------------------|----------|----------|
|                     |                                                                                       | 8-inch.                               | 10-inch. | 12-inch. |
| 804                 | Block 7, Bloomingdale .....                                                           | .....                                 | .....    | .....    |
| 825                 | Baltimore and Ohio R. R. (right of way), between Maple avenue<br>and Blair road ..... | .....                                 | 367      | 2        |
| 803                 | Cincinnati street NE., between Third and Fourth streets .....                         | .....                                 | .....    | .....    |
| 815                 | Champlain avenue NW., between Superior and Erie streets .....                         | .....                                 | .....    | .....    |
| 824                 | Chestnut avenue crossing, Baltimore and Ohio R. R. ....                               | 93                                    | .....    | .....    |
| 826                 | California avenue NW., between Eighteenth street and Florida<br>avenue .....          | .....                                 | .....    | .....    |
| 805                 | Dartmouth street NW., between Eleventh street and Sherman<br>avenue .....             | .....                                 | .....    | .....    |
| 802                 | Folsom street, from Newark street northward .....                                     | 206                                   | .....    | .....    |
| 807                 | Fifth street NW., between Des Moines and Erie streets .....                           | .....                                 | .....    | 389      |
| 809                 | Fifth street NW., between Erie and Flint streets .....                                | .....                                 | 306      | .....    |
| 817                 | Fillmore street, between Harrison and Jackson streets .....                           | .....                                 | .....    | 139      |
| 806                 | Jefferson street, between Polk and Fillmore streets .....                             | .....                                 | .....    | 211      |
| 827                 | Le Droit avenue, between Seaton and Thomas streets .....                              | .....                                 | 54       | .....    |
| 829                 | Maple avenue, between Baltimore and Ohio R. R. and Carroll<br>avenue .....            | .....                                 | 206      | .....    |
| 828                 | North Capitol street, between Seaton and T streets .....                              | .....                                 | .....    | .....    |
| 812                 | Ontario avenue, between Superior and Erie streets .....                               | .....                                 | .....    | .....    |
| 813                 | .....do .....                                                                         | .....                                 | .....    | .....    |
| 811                 | Phelps place NW., between S street and Florida avenue .....                           | .....                                 | .....    | .....    |
| 821                 | Piney Branch road, from Vermillion street northward .....                             | .....                                 | .....    | 210      |
| 816                 | Randolph street, crossing North Capitol street .....                                  | .....                                 | .....    | .....    |
| 819                 | Randolph street, crossing First street NW .....                                       | .....                                 | .....    | .....    |
| 818                 | S street NW., between Phelps place and Florida avenue .....                           | .....                                 | .....    | .....    |
| 800                 | Thirty-seventh street, between W and Y streets .....                                  | 27                                    | .....    | .....    |
| 801                 | Thirty-fourth street, from Newark street northward .....                              | 199                                   | .....    | .....    |
| 808                 | Third street NW., between Genesee and Kanawha streets .....                           | .....                                 | .....    | .....    |
| 814                 | Block 28, Rosedale and Isherwood subdivision .....                                    | .....                                 | .....    | 44       |
| 820                 | Third and Quincy streets NE. (intersection) .....                                     | .....                                 | .....    | .....    |
| 810                 | W street NE., between Fourth and Fifth streets .....                                  | .....                                 | .....    | .....    |
| 822                 | Wallace street, between Frankfort and Hartford streets .....                          | .....                                 | 169      | .....    |
| 823                 | Woodley road, between Thirty-sixth street and Wisconsin avenue .....                  | .....                                 | 463      | .....    |
|                     | Total .....                                                                           | 525                                   | 1,655    | 965      |

<sup>1</sup> Awaiting bill for repairs to pavements.<sup>2</sup> Includes \$6 cost of work by plumber.

upham sewers.

| Pipe sewers laid (length in feet). |          |          |          | Man-holes. | Branches. | Cost of materials. | Cost of labor.      | Cost of repairs to pavements. | Total cost.         |
|------------------------------------|----------|----------|----------|------------|-----------|--------------------|---------------------|-------------------------------|---------------------|
| 15-inch.                           | 18-inch. | 21-inch. | 24-inch. |            |           |                    |                     |                               |                     |
| 126                                |          |          |          | 1          | 3         | \$102.56           | \$243.73            | -----                         | \$346.29            |
|                                    |          |          |          | 3          | 2         | 191.35             | 255.71              | -----                         | 447.06              |
|                                    |          |          |          | 2          | 3         | 280.13             | 574.25              | -----                         | 854.38              |
| 405                                |          |          |          | 1          | 1         | 241.25             | 335.85              | -----                         | 577.10              |
| 371                                |          |          |          | 1          | -----     | 48.08              | 72.93               | -----                         | 121.01              |
| 130                                |          |          |          | 1          | 2         | 85.47              | 172.05              | -----                         | ( <sup>1</sup> )    |
|                                    |          |          |          | 1          | -----     | 61.19              | 96.30               | -----                         | 157.49              |
| 63                                 |          |          |          | 1          | 4         | 61.29              | 131.53              | -----                         | 192.82              |
|                                    |          |          |          | 2          | 1         | 176.17             | 482.41              | -----                         | 658.58              |
|                                    |          |          |          | 2          | 9         | 153.72             | 310.35              | -----                         | 464.07              |
|                                    |          |          |          | 2          | 5         | 88.95              | <sup>2</sup> 139.95 | -----                         | 228.90              |
|                                    |          |          |          | 1          | 8         | 96.60              | 139.35              | -----                         | 235.95              |
| 57                                 | 63       |          |          | 1          | -----     | 94.71              | 158.46              | -----                         | <sup>3</sup> 253.17 |
|                                    |          |          |          |            | 4         | 66.72              | 151.76              | -----                         | <sup>2</sup> 218.48 |
| 130                                |          |          |          | 1          | -----     | 94.65              | 119.55              | -----                         | ( <sup>1</sup> )    |
|                                    | 376      |          |          | 2          | 5         | 358.98             | 483.70              | -----                         | 842.68              |
| 253                                |          |          |          | 1          | 11        | 182.29             | 342.79              | -----                         | 525.08              |
| 96                                 |          |          |          | 1          | -----     | 78.21              | 137.03              | -----                         | 215.24              |
|                                    |          |          |          | 1          | -----     | 94.57              | 169.90              | -----                         | 264.47              |
| 66                                 |          |          |          | 1          | -----     | 51.10              | 79.25               | \$7.09                        | 137.44              |
|                                    |          |          |          | 1          | -----     | 30.69              | 43.28               | 94.58                         | 168.55              |
|                                    | 21       |          |          | 1          | -----     | 30.69              | 43.28               | 94.58                         | 168.55              |
| 318                                |          |          |          | 2          | -----     | 226.13             | 375.04              | 20.17                         | 621.34              |
|                                    |          |          |          |            | -----     | 3.83               | 16.85               | -----                         | 20.68               |
|                                    |          |          |          | 1          | 2         | 60.14              | 163.18              | -----                         | 223.32              |
|                                    |          |          |          |            | -----     | 48.22              | 595.59              | -----                         | <sup>4</sup> 553.81 |
|                                    |          |          |          | 1          | 1         | 32.44              | 39.84               | -----                         | 72.28               |
| 33                                 | 12       |          |          | 2          | -----     | 82.64              | 97.58               | -----                         | ( <sup>1</sup> )    |
|                                    | 63       | 243      | 18       | 3          | -----     | 316.37             | 415.19              | -----                         | 731.56              |
|                                    |          |          |          | 2          | -----     | 46.16              | 141.35              | -----                         | 187.51              |
|                                    |          |          |          | 1          | 5         | 156.35             | 643.12              | -----                         | 799.47              |
| 442                                | 1,800    | 640      | 18       | 39         | 66        | 3,610.96           | 7,037.87            | 121.84                        | 10,118.73           |

<sup>1</sup> Work completed in fiscal year 1902.

<sup>2</sup> One fish pond, 396 linear feet 4-inch inlet and 264 linear feet 4-inch outlet, constructed.

TABLE 8.—*Miscellaneous appropriations in*

| No. of order. | Location.                                                            | Pipe sewers laid (length in feet). |         |          |          |          |          |
|---------------|----------------------------------------------------------------------|------------------------------------|---------|----------|----------|----------|----------|
|               |                                                                      | 6-inch.                            | 8-inch. | 10-inch. | 12-inch. | 15-inch. | 18-inch. |
| 1036          | A street N.E., between Fourth and Seventh streets.....               | .....                              | .....   | .....    | 12       | .....    | .....    |
| 1049          | I street S.W., just west of First street.....                        | .....                              | .....   | .....    | 6        | .....    | .....    |
| 1052          | B street N.E., between Third and Seventh streets.....                | .....                              | .....   | .....    | 9        | .....    | .....    |
| 1050          | C street N.W., between First and New Jersey avenue.....              | .....                              | .....   | .....    | 147      | .....    | .....    |
| 1000          | F street N.E., between Delaware avenue and Third street.....         | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1008          | Fifth and G streets N.W. (northwest and southwest corners)           | .....                              | .....   | .....    | 30       | .....    | .....    |
| 1028          | Fifteenth and B streets N.W. (northeast and northwest corners)       | .....                              | .....   | .....    | 12       | .....    | .....    |
| 1032          | Fourteenth and T streets N.W. (northwest and southwest corners)      | .....                              | .....   | .....    | 6        | .....    | .....    |
| 1031          | Fourteenth and V streets N.W. (northwest corner).....                | .....                              | .....   | .....    | 3        | .....    | .....    |
| 1040          | F street N.E., between North Capitol and Delaware avenue.....        | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1022          | Sixth street and Massachusetts avenue N.W. (northwest corner)        | .....                              | .....   | .....    | .....    | 6        | .....    |
| 1027          | Sixteenth and B streets N.W. (northeast and northwest corners)       | .....                              | .....   | .....    | 6        | .....    | .....    |
| 1034          | Twenty-third and L streets N.W. (northeast and northwest corners)    | .....                              | .....   | .....    | 48       | .....    | .....    |
| 1035          | Twenty-third and M streets N.W. (northwest and southwest corners)    | .....                              | .....   | .....    | 63       | .....    | .....    |
| 1048          | Twelfth and Maryland avenue and Twelfth and D streets N.E.           | .....                              | .....   | .....    | 6        | .....    | .....    |
| 1047          | Bennings road, just east of Eastern Branch.....                      | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1053          | Bladensburg road, between H and Levis streets.....                   | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1011          | Eighteenth street and Virginia avenue (northwest corner)             | .....                              | .....   | .....    | 12       | .....    | .....    |
| 1012          | Nineteenth street and Virginia avenue N.W. (northwest corner)        | .....                              | .....   | .....    | .....    | .....    | 39       |
| 1013          | New York avenue and Nineteenth street N.W. (northwest corner)        | .....                              | .....   | .....    | 33       | .....    | .....    |
| 1041          | Q street, just west of First street N.W.....                         | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1014          | Twentieth street and Virginia avenue N.W. (northwest corner)         | .....                              | .....   | .....    | 3        | .....    | .....    |
| 1015          | Twentieth and E streets N.W. (northwest corner).....                 | .....                              | .....   | .....    | 3        | .....    | .....    |
| 1016          | Twenty-first street and Virginia avenue N.W. (northwest corner)      | .....                              | .....   | .....    | .....    | 15       | .....    |
| 1017          | Twenty-first and E streets N.W. (northwest corner).....              | .....                              | .....   | .....    | 6        | .....    | .....    |
| 1010          | Fortieth and Xenia streets N.W.....                                  | 2 146                              | .....   | .....    | .....    | .....    | .....    |
| 1023          | Fifteenth street N.E., between Gales and Rosedale streets.....       | 3 594                              | .....   | .....    | .....    | .....    | .....    |
| 1029          | Fourth and F streets N.E. (southwest corner).....                    | .....                              | .....   | .....    | 12       | .....    | .....    |
| 1030          | Fourth and E streets N.E. (southeast and southwest corners)          | .....                              | .....   | .....    | 21       | .....    | .....    |
| 1051          | Fifth and E streets N.E. (southeast and southwest corners)           | .....                              | .....   | .....    | 3        | .....    | .....    |
| 1002          | Ninth and D streets N.E. (southeast corner).....                     | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1001          | Tenth and D streets N.E. (southeast corner).....                     | .....                              | .....   | 3        | .....    | .....    | .....    |
| 1003          | Twelfth and D streets N.E. (southwest corner).....                   | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1004          | Thirteenth and D streets N.E. (southwest corner).....                | .....                              | .....   | .....    | 9        | .....    | .....    |
| 1033          | Fortieth street N.W., between Loughboro road and Xenia street.....   | 360                                | .....   | .....    | .....    | .....    | .....    |
| 1042          | Fortieth and Xenia streets N.W.....                                  | 4 100                              | .....   | .....    | .....    | .....    | .....    |
| 1005          | G street N.W., between Sixth and Fifteenth streets.....              | 6                                  | .....   | .....    | 45       | 6        | .....    |
| 1009          | Sixth and G streets N.W. (northeast and southeast corners)           | .....                              | .....   | .....    | 12       | .....    | .....    |
| 1019          | Half and G streets S.W. (southwest corner).....                      | .....                              | .....   | .....    | 3        | .....    | .....    |
| 1018          | First and I streets S.W. (northeast corner).....                     | .....                              | .....   | .....    | 3        | .....    | .....    |
| 1025          | Squares 617 and 669.....                                             | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1044          | Ninth and E streets S.E. (southeast corner).....                     | 15                                 | .....   | .....    | 18       | .....    | .....    |
| 1045          | Ninth and E streets S.E. (northeast corner).....                     | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1046          | Pennsylvania avenue S.E., between E and Eleventh streets.....        | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1006          | Second and L streets S.E. (northwest corner).....                    | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1007          | South Capitol and K streets S.E. (southeast corner).....             | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1038          | Pennsylvania avenue N.W., between First and Seventeenth streets..... | .....                              | .....   | .....    | .....    | .....    | .....    |
| 1039          | Pennsylvania avenue N.W.....                                         | .....                              | .....   | .....    | .....    | .....    | .....    |

<sup>1</sup> Work completed in fiscal year 1902.<sup>2</sup> Constructing drain around chemical engine house, 9 linear feet 4-inch pipe used in addition to pipe in table.<sup>3</sup> Constructing drain around school building.<sup>4</sup> Constructing drain around chemical engine house.

fiscal year 1901; work performed by day labor.

| 4 foot 9 inch diameter. | 4 inch lead pipe. | Branches. | Manholes ad-justed. | Man holes constructed. | Basins ad-justed. | Basins con-structed. | Cost of mate-rials. | Cost of labor and con-tingen-cies. | Total cost.           | Appropriations.                                      |
|-------------------------|-------------------|-----------|---------------------|------------------------|-------------------|----------------------|---------------------|------------------------------------|-----------------------|------------------------------------------------------|
|                         |                   |           |                     |                        |                   | 4                    | \$103.85            | \$130.24                           | \$234.09              | Repairs to streets, 1901.                            |
|                         |                   |           |                     |                        |                   | 1                    | 18.20               | 24.81                              | 43.01                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 3                    | 78.90               | 82.30                              | 161.20                | Do.                                                  |
|                         |                   |           |                     | 1                      |                   | 3                    | 129.24              | 202.75                             | 331.99                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 5                    | 94.08               | 109.61                             | 203.69                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 2                    | 45.62               | 71.99                              | 117.61                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 2                    | 54.05               | 52.16                              | 106.21                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 2                    | 52.66               | 66.63                              | 119.29                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 27.16               | 28.04                              | 55.20                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 2                    | 50.94               | 53.35                              | 104.29                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 27.59               | 26.79                              | 54.38                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 2                    | 52.51               | 56.01                              | 108.52                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 2                    | 65.97               | 56.90                              | 122.87                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 2                    | 69.71               | 78.04                              | 147.75                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 26.66               | 31.33                              | 57.99                 | Do.                                                  |
|                         |                   |           | 3                   |                        |                   |                      | 20.47               | 42.83                              | 63.30                 | Improvements, Bennings road, east of Eastern Branch. |
|                         |                   |           |                     |                        |                   |                      |                     | 8.14                               | (1)                   | Bladensburg road, 1901.                              |
|                         |                   |           |                     |                        |                   | 1                    | 29.69               | 32.87                              | 62.56                 | Improvements and repairs, northwest section.         |
|                         |                   |           | 1                   |                        |                   | 1                    | 69.50               | 76.27                              | 145.77                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 36.76               | 36.48                              | 73.24                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 8.26                | 5.83                               | 14.09                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 26.43               | 27.92                              | 54.35                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 26.43               | 22.45                              | 48.88                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 32.27               | 35.28                              | 67.55                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 43.35               | 33.81                              | 77.16                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 27.42               | 74.67                              | 102.09                | Buildings, fire department, Tennallytown.            |
|                         |                   | 3         |                     |                        |                   |                      | 117.42              | 222.32                             | 339.74                | Eight-room school building site, northeast, 1901.    |
|                         |                   |           |                     |                        |                   | 1                    | 30.29               | 34.15                              | 64.44                 | Improvements and repairs, northeast section, 1901.   |
|                         |                   |           |                     |                        |                   |                      | 57.03               | 55.45                              | 112.48                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 2                    | 52.49               | 50.15                              | 102.64                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 25.81               | 27.34                              | 53.18                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 26.29               | 26.05                              | 52.34                 | Do.                                                  |
|                         |                   |           |                     |                        | 1                 |                      | 17.00               | 24.36                              | 41.36                 | Do.                                                  |
|                         |                   |           |                     |                        | 1                 |                      | 24.23               | 27.37                              | 51.60                 | Do.                                                  |
|                         |                   |           |                     |                        |                   |                      | 24.73               | 101.20                             | 125.93                | Chemical Engine Co., Tennallytown, 1901.             |
|                         |                   | 2         |                     |                        |                   |                      | 11.45               | 67.75                              | 79.20                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 6                    | 153.77              | <sup>5</sup> 183.51                | 337.28                | Improvements and repairs, widening G street.         |
|                         |                   |           |                     |                        |                   | 2                    | 51.92               | 67.69                              | 119.61                | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 16.66               | 28.09                              | 44.75                 | Improvements and repairs, southwest section, 1901.   |
|                         |                   |           |                     |                        |                   | 1                    | 17.20               | 22.63                              | 39.83                 | Do.                                                  |
|                         |                   |           |                     |                        |                   |                      |                     | <sup>6</sup> 30.22                 | 30.22                 | Site 8-room school, tenth division, colored.         |
|                         |                   |           |                     |                        |                   | 1                    | 31.92               | 42.03                              | 73.95                 | Improvements and repairs, southeast section, 1901.   |
|                         |                   |           |                     |                        |                   | 1                    | 25.11               | 27.99                              | 53.10                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 6.93                | 8.69                               | 15.62                 | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    |                     | 6.13                               | 6.13                  | Do.                                                  |
|                         |                   |           |                     |                        |                   | 1                    | 17.24               | 24.21                              | 41.45                 | Do.                                                  |
|                         |                   |           |                     |                        |                   |                      | 45.44               | <sup>7</sup> 328.61                | <sup>8</sup> 374.05   | Emergency fund, 1901.                                |
|                         |                   |           |                     |                        |                   |                      | 1,364.10            | 830.33                             | <sup>9</sup> 2,194.43 | Maintain public order February and March, 1901.      |

<sup>5</sup> Includes \$3.30, cost of work by plumber.

<sup>6</sup> Digging test holes.

<sup>7</sup> Includes \$37.75, cost of repairs to pavements.

<sup>8</sup> Roping off Pennsylvania avenue for centennial parade.

<sup>9</sup> Roping off Pennsylvania avenue for inaugural parade.

TABLE 8.—*Miscellaneous appropriations in*

| No. of order. | Location.                                                  | Pipe sewers laid (length in feet). |         |          |          |          |          |
|---------------|------------------------------------------------------------|------------------------------------|---------|----------|----------|----------|----------|
|               |                                                            | 6-inch.                            | 8-inch. | 10-inch. | 12-inch. | 15-inch. | 18-inch. |
| 1021          | Second street and South Carolina avenue SE .....           | 362                                |         |          |          |          |          |
| 1037          | Seventh and Vermillion streets .....                       | 464                                |         |          |          |          |          |
| 1043          | do. ....                                                   | 75                                 |         |          |          |          |          |
| 1024          | Sixteenth and Crescent streets (southwest corner) .....    |                                    |         |          | 12       |          |          |
| 1020          | Twenty-ninth and Q streets NW .....                        |                                    |         | 30       |          |          |          |
| 1             | Siphons—various .....                                      | 123                                | 9       |          |          |          |          |
| 2             | Siphons—Morris and Fifteenth streets NW. (intersection) .. | 3                                  |         |          |          |          |          |
| 1             | Arizona avenue—Arizona avenue crossing Joliet street ..... | 150                                |         |          |          |          |          |
| 1026          | Grant and School streets NW .....                          |                                    |         |          |          |          |          |
|               | Total .....                                                | 2,398                              | 9       | 33       | 531      | 45       | 30       |

<sup>1</sup> Constructing drain around school building.<sup>2</sup> Includes \$18.31, cost of work by plumber.<sup>3</sup> Includes \$6.36, cost of work by plumber.



fiscal year 1901; work performed by day labor—Continued.

| 6 feet 6 inch diameter. | 4-inch lead pipe. | Branches. | Manholes adjusted. | Manholes constructed. | Basins adjusted. | Basins constructed. | Cost of materials. | Cost of labor and contingencies. | Total cost.           | Appropriations.                                         |
|-------------------------|-------------------|-----------|--------------------|-----------------------|------------------|---------------------|--------------------|----------------------------------|-----------------------|---------------------------------------------------------|
|                         |                   |           |                    |                       |                  |                     | \$74.53            | \$115.99                         | <sup>1</sup> \$190.52 | Eight-room school, third division, southeast.           |
|                         |                   | 1         |                    |                       |                  |                     | 73.57              | 199.65                           | <sup>2</sup> 273.22   | School building site, Takoma Park.                      |
|                         |                   |           |                    | 1                     |                  |                     | 29.90              | 51.31                            | 81.21                 | Do.                                                     |
|                         |                   |           |                    |                       |                  | 1                   | 21.54              | 27.13                            | 48.67                 | Grading and improving Crescent street.                  |
|                         |                   |           |                    |                       |                  | 2                   | 58.87              | 70.51                            | 129.38                | Improvements and repairs, Georgetown, 1901.             |
|                         | 75                |           |                    | 5                     |                  | 5                   | 347.27             | <sup>2</sup> 382.53              | 729.80                | Automatic flushing tanks.                               |
|                         | 6                 |           |                    | 1                     |                  | 1                   | 50.50              | <sup>3</sup> 58.39               | 108.89                | Do.                                                     |
| 132.6                   |                   |           |                    | 1                     |                  |                     | 773.89             | 1,140.39                         | 1,914.28              | Arizona avenue sewer, 1901.                             |
|                         |                   |           |                    |                       |                  | 43                  | 52.25              | <sup>5</sup> 100.15              | 152.40                | Repairs and improvements, school buildings and grounds. |
| 132.6                   | 81                | 6         | 3                  | 12                    | 5                | 72                  | 4,817.10           | 5,839.82                         | 10,648.78             |                                                         |

<sup>4</sup> Constructing basins and 103 linear feet 4-inch drain in yard of Johnson School.

<sup>5</sup> Includes \$10.98, cost of work by plumber.

TABLE 9.—Average cost of materials and labor per linear foot of pipe sewers constructed by day labor, also average cost of basins.

[In this table it is assumed that the cost of materials used in basin connections is the same as that in the same size sewer; it is also assumed that on account of the difference in depth of excavation the cost of labor is half the cost of that of the same size sewer. This table does not embrace the cost of work of exceptionally difficult construction.]

| Size of sewers.         | Length.      | Cost of materials. | Cost of labor.   | Total cost.      |
|-------------------------|--------------|--------------------|------------------|------------------|
|                         | <i>Feet.</i> | <i>Per foot.</i>   | <i>Per foot.</i> | <i>Per foot.</i> |
| 8-inch.....             | 4,888        | \$0.30 —           | \$0.785          | \$1.085          |
| 10-inch.....            | 11,534       | .408 —             | .859 +           | 1.267            |
| 12-inch.....            | 17,936       | .46 —              | .919 —           | 1.379            |
| 15-inch.....            | 2,586        | .638 +             | 1.19 +           | 1.828            |
| 18-inch.....            | 4,111        | .728 +             | 1.382 +          | 2.11             |
| 21-inch.....            | 2,188        | .888 +             | 1.496 —          | 2.387            |
| 24-inch.....            | 633          | 1.175              | 2.196            | 3.371            |
| 8-inch connection.....  | 39           | .30                | .392             | .692             |
| 10-inch connection..... | 1,470        | .408               | .429             | .837             |
| 12-inch connection..... | 1,818        | .46                | .459             | .919             |
| 15-inch connection..... | 1,014        | .638               | .595             | 1.233            |
| 18-inch connection..... | 129          | .728               | .691             | 1.419            |
| 24-inch connection..... | 117          | 1.175              | 1.068            | 2.273            |
| Basins constructed..... | 223          | 22.798             | 24.097           | 46.895           |

TABLE 10.—Number of foremen, inspectors, and other employees of the sewer division, offices of the chief clerk, disbursing officer, inspector of asphalt and cements, and of the engineer stables, temporarily employed, and appropriation from which paid, for year ending June 30, 1901.

| Class.               | Number employed. | Cleaning and repairing sewers and basins. | Replacing obstructed sewers. | Main and pipe sewers. | Suburban sewers. | Assessment permit and whole cost. | Preparation, plans, and specifications, sewage-disposal system. |
|----------------------|------------------|-------------------------------------------|------------------------------|-----------------------|------------------|-----------------------------------|-----------------------------------------------------------------|
| Foremen.....         | 11               | \$6,174.57                                | \$567.00                     | \$1,246.00            | \$457.50         | \$1,992.50                        | \$303.50                                                        |
| Inspectors.....      | 16               | 104.00                                    | 44.00                        | 1,036.00              | 1,256.00         | 197.00                            | —                                                               |
| Other employees..... | 343              | 27,223.06                                 | 8,419.74                     | 19,731.32             | 8,212.31         | 26,458.56                         | 8,968.97                                                        |
| Total.....           | —                | 33,501.63                                 | 9,030.74                     | 22,013.32             | 9,925.81         | 28,648.06                         | 9,302.47                                                        |

| Class.               | Arizona avenue sewer. | Automatic flushing tanks. | East side intercepting Twelfth street SE. and pumping station. | East side intercepting Twenty-second and A streets NE. and Twelfth street SE. | Tiber Creek and New Jersey avenue high-level intercepting sewer. | L street sewer. | Sewage pumping plant. | Extension boundary sewer. | Repairs to streets. |
|----------------------|-----------------------|---------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------|-----------------------|---------------------------|---------------------|
| Foremen.....         | \$109.00              | \$41.00                   | —                                                              | —                                                                             | —                                                                | —               | —                     | —                         | \$91.00             |
| Inspectors.....      | 804.00                | —                         | \$1,448.50                                                     | \$1,511.50                                                                    | \$2,034.00                                                       | \$720.00        | \$423.50              | \$312.00                  | —                   |
| Other employees..... | 1,220.84              | 375.25                    | 903.25                                                         | 941.17                                                                        | 564.70                                                           | 705.88          | 941.17                | —                         | 778.33              |
| Total.....           | 2,133.84              | 416.25                    | 2,351.75                                                       | 2,452.67                                                                      | 2,598.70                                                         | 1,425.88        | 1,364.67              | 312.00                    | 869.33              |

| Class.               | Improving Benning road, east of Eastern Branch. | Bladensburg road. | Improvements and repairs, N.W. section. | Buildings for fire department, Tennallytown. | Eight-room school building site, N.E. section. | Improvements and repairs, N.E. section. | Chemical engine company, Tennallytown. | Improvements and repairs, widening G street. | Improvements and repairs, S.W. section. |
|----------------------|-------------------------------------------------|-------------------|-----------------------------------------|----------------------------------------------|------------------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------------------|-----------------------------------------|
| Foremen.....         | \$4.00                                          | \$1.00            | \$19.00                                 | \$8.00                                       | \$15.00                                        | \$26.00                                 | \$5.00                                 | \$17.00                                      | \$5.00                                  |
| Other employees..... | 35.82                                           | 61.65             | 214.30                                  | 61.81                                        | 191.14                                         | 238.47                                  | 65.27                                  | 219.14                                       | 42.69                                   |
| Total.....           | 39.82                                           | 62.65             | 233.30                                  | 69.81                                        | 206.14                                         | 264.47                                  | 70.27                                  | 236.14                                       | 47.69                                   |

TABLE 10. —Number of foremen, inspectors, and other employees, etc.—Continued.

| Class.          | Site 8-room school building, Tenth division, colored. | Im-provements and re-pairs, SE. sec-tion. | Emer-gency fund. | Mainte-nance public order, Febru-ary and March. | Eight-room school build-ing, Third division, colored. | School building and site, Ta-koma Park. | Grad-ing and im-prove-ment, Cres-cent street. | Im-provements and re-pairs, George-town. | Repairs and im-prove-ments, school build-ings and grounds. |
|-----------------|-------------------------------------------------------|-------------------------------------------|------------------|-------------------------------------------------|-------------------------------------------------------|-----------------------------------------|-----------------------------------------------|------------------------------------------|------------------------------------------------------------|
| Foremen.....    | \$5.00                                                | \$8.00                                    | \$45.00          | \$89.50                                         | \$9.00                                                | \$21.00                                 | \$2.00                                        | 35.00                                    | \$10.00                                                    |
| Other employees | 23.78                                                 | 45.48                                     | 245.85           | 467.09                                          | 97.92                                                 | 216.95                                  | 22.81                                         | 59.35                                    | 68.54                                                      |
| Total           | 28.78                                                 | 53.48                                     | 290.85           | 556.59                                          | 106.92                                                | 237.95                                  | 24.81                                         | 64.35                                    | 78.54                                                      |

TABLE 11. —Amount of conduits laid from March 27, 1900, to June 30, 1901.

| No. of duct. | United States Electric Light-ing Co. |        | Chesapeake and Potomac Tele-phone Co. <sup>1</sup> |       | Potomac Electric Power Co. |        |
|--------------|--------------------------------------|--------|----------------------------------------------------|-------|----------------------------|--------|
|              | Conduit.                             | Duct.  | Conduit.                                           | Duct. | Conduit.                   | Duct.  |
|              | Feet.                                | Feet.  | Feet.                                              | Feet. | Feet.                      | Feet.  |
| 1            | .....                                | .....  | .....                                              | ..... | .....                      | .....  |
| 2            | .....                                | .....  | 677                                                | 1,354 | .....                      | .....  |
| 3            | .....                                | .....  | 124                                                | 496   | 2,450                      | 9,800  |
| 4            | 13,836                               | 55,344 | .....                                              | ..... | 71                         | 568    |
| 8            | 30                                   | 240    | .....                                              | ..... | .....                      | .....  |
| 32           | .....                                | .....  | 20                                                 | 640   | .....                      | .....  |
| 40           | .....                                | .....  | 55                                                 | 2,200 | .....                      | .....  |
| Total        | 13,866                               | 55,584 | 876                                                | 4,690 | 2,521                      | 10,368 |

| No. of duct. | Brightwood Rail-way Co. |       | District of Co-lumbia. |       | Private conduits. |       |
|--------------|-------------------------|-------|------------------------|-------|-------------------|-------|
|              | Conduit.                | Duct. | Conduit.               | Duct. | Conduit.          | Duct. |
|              | Feet.                   | Feet. | Feet.                  | Feet. | Feet.             | Feet. |
| 1            | .....                   | ..... | .....                  | ..... | .....             | ..... |
| 2            | .....                   | ..... | 2,913                  | 2,913 | 30                | 30    |
| 3            | .....                   | ..... | .....                  | ..... | 227               | 454   |
| 4            | .....                   | ..... | .....                  | ..... | .....             | ..... |
| 8            | 88                      | 704   | .....                  | ..... | .....             | ..... |
| 32           | .....                   | ..... | .....                  | ..... | .....             | ..... |
| 40           | .....                   | ..... | .....                  | ..... | .....             | ..... |
| Total        | 88                      | 704   | 2,913                  | 2,913 | 257               | 484   |

<sup>1</sup> For house connections only.

NUMBER OF MANHOLES AND HAND-HOLES BUILT.

|                                                         | Manholes. | Hand-holes. |
|---------------------------------------------------------|-----------|-------------|
| United States Electric Lighting Co .....                | 79        | 271         |
| Potomac Electric Power Co .....                         | 16        | 43          |
| Chesapeake and Potomac Telephone Co .....               | 8         | .....       |
| District of Columbia .....                              | .....     | .....       |
| Washington, Alexandria and Mount Vernon Railway Co..... | 1         | .....       |
| Brightwood Railway Co .....                             | 1         | 1           |
| Metropolitan Railroad Co .....                          | 2         | .....       |
| City and Suburban Railway Co .....                      | 2         | .....       |
| Total .....                                             | 109       | 315         |

TABLE 11.—*Amount of conduits laid, etc.*—Continued.

SUMMARY OF CONDUITS IN USE JUNE 30, 1901.

| No. of duct. | United States Electric Light-<br>ing Co. |              | Chesapeake and Potomac Tele-<br>phone Co. |              | Potomac Electric Power Co. |              |
|--------------|------------------------------------------|--------------|-------------------------------------------|--------------|----------------------------|--------------|
|              | Conduit.                                 | Duct.        | Conduit.                                  | Duct.        | Conduit.                   | Duct.        |
|              | <i>Feet.</i>                             | <i>Feet.</i> | <i>Feet.</i>                              | <i>Feet.</i> | <i>Feet.</i>               | <i>Feet.</i> |
| 1            | 26,177                                   | 26,177       | 15,596                                    | 15,596       | 1,557                      | 1,557        |
| 2            | 128,126                                  | 256,252      | 4,554                                     | 8,708        | 766                        | 1,532        |
| 3            | 236                                      | 708          |                                           |              |                            |              |
| 4            | 73,209                                   | 292,836      | 600                                       | 2,640        | 6,019                      | 24,076       |
| 6            | 35,461                                   | 212,766      | 23,185                                    | 139,110      | 9,488                      | 56,928       |
| 7            |                                          |              | 82                                        | 574          |                            |              |
| 8            | 11,352                                   | 90,816       | 18,090                                    | 144,720      | 8,634                      | 69,072       |
| 9            |                                          |              | 114                                       | 1,026        | 7,288                      | 65,592       |
| 10           | 88                                       | 880          |                                           |              |                            |              |
| 12           | 1,491                                    | 17,892       | 4,963                                     | 59,556       | 37,979                     | 455,748      |
| 13           |                                          |              | 212                                       | 2,756        | 374                        | 4,962        |
| 14           | 1,224                                    | 18,136       |                                           |              |                            |              |
| 15           | 68                                       | 1,020        |                                           |              |                            |              |
| 16           | 2,793                                    | 44,688       | 5,825                                     | 93,200       | 1,314                      | 21,024       |
| 17           |                                          |              | 636                                       | 10,812       |                            |              |
| 18           |                                          |              | 1,576                                     | 28,368       |                            |              |
| 20           |                                          |              | 26                                        | 520          | 85                         | 1,700        |
| 22           |                                          |              |                                           |              |                            |              |
| 24           | 2,609                                    | 50,376       | 2,072                                     | 49,728       |                            |              |
| 25           |                                          |              | 304                                       | 7,600        |                            |              |
| 26           |                                          |              |                                           |              |                            |              |
| 28           |                                          |              |                                           |              |                            |              |
| 30           | 53                                       | 1,590        |                                           |              |                            |              |
| 32           |                                          |              | 485                                       | 15,520       |                            |              |
| 36           | 3,854                                    | 138,744      | 26                                        | 936          |                            |              |
| 40           |                                          |              | 1,589                                     | 63,560       |                            |              |
| 44           |                                          |              |                                           |              | 424                        | 18,656       |
| 56           |                                          |              | 749                                       | 41,944       |                            |              |
| 58           |                                          |              |                                           |              | 7                          | 406          |
| 64           | 106                                      | 6,784        | 176                                       | 11,264       |                            |              |
| 72           |                                          |              | 76                                        | 5,472        |                            |              |
| Total        | 286,337                                  | 1,150,665    | 80,796                                    | 703,610      | 73,035                     | 721,253      |

| No. of duct. | Brightwood Rail-<br>way Co. |              | District of Co-<br>lumbia. |              | Private conduits. |              |
|--------------|-----------------------------|--------------|----------------------------|--------------|-------------------|--------------|
|              | Conduit.                    | Duct.        | Conduit.                   | Duct.        | Conduit.          | Duct.        |
|              | <i>Feet.</i>                | <i>Feet.</i> | <i>Feet.</i>               | <i>Feet.</i> | <i>Feet.</i>      | <i>Feet.</i> |
| 1            |                             |              | 464                        |              | 30                | 30           |
| 2            | 13                          | 26           | 80                         |              | 227               | 454          |
| 3            |                             |              |                            |              |                   |              |
| 4            |                             |              | 44                         |              |                   |              |
| 6            |                             |              | 711                        |              |                   |              |
| 7            |                             |              |                            |              |                   |              |
| 8            | 176                         | 1,408        |                            |              |                   |              |
| 9            |                             |              |                            |              |                   |              |
| 10           |                             |              |                            |              |                   |              |
| 12           |                             |              |                            |              |                   |              |
| 13           |                             |              |                            |              |                   |              |
| 14           |                             |              |                            |              |                   |              |
| 15           |                             |              |                            |              |                   |              |
| 16           |                             |              |                            |              |                   |              |
| 17           |                             |              |                            |              |                   |              |
| 18           |                             |              |                            |              |                   |              |
| 20           |                             |              |                            |              |                   |              |
| 22           |                             |              |                            |              |                   |              |
| 24           |                             |              |                            |              |                   |              |
| 25           |                             |              |                            |              |                   |              |
| 26           |                             |              |                            |              |                   |              |
| 28           |                             |              |                            |              |                   |              |
| 30           |                             |              |                            |              |                   |              |
| 32           |                             |              |                            |              |                   |              |
| 36           |                             |              |                            |              |                   |              |
| 40           |                             |              |                            |              |                   |              |
| 44           |                             |              |                            |              |                   |              |
| 56           |                             |              |                            |              |                   |              |
| 58           |                             |              |                            |              |                   |              |
| 64           |                             |              |                            |              |                   |              |
| 72           |                             |              |                            |              |                   |              |
| Total        | 189                         | 1,434        | 1,290                      |              | 257               | 484          |

TABLE 11.—Amount of conduits laid, etc.—Continued.

| No. of duct. | Postal Tele-<br>graph Cable<br>Co. |                        | United States<br>Government. |              | Anacostia and<br>Potomac R. R.<br>Co. |              | Capital Trac-<br>tion R. R. Co. |              |
|--------------|------------------------------------|------------------------|------------------------------|--------------|---------------------------------------|--------------|---------------------------------|--------------|
|              | Con-<br>duit.                      | Duct.                  | Con-<br>duit.                | Duct.        | Con-<br>duit.                         | Duct.        | Con-<br>duit.                   | Duct.        |
|              | <i>Feet.</i><br>13,236             | <i>Feet.</i><br>13,236 | <i>Feet.</i>                 | <i>Feet.</i> | <i>Feet.</i>                          | <i>Feet.</i> | <i>Feet.</i>                    | <i>Feet.</i> |
| 1            |                                    |                        |                              |              |                                       |              | 15,742                          | 31,484       |
| 2            |                                    |                        |                              |              |                                       |              |                                 |              |
| 3            |                                    |                        |                              |              |                                       |              |                                 |              |
| 4            | 1,427                              | 5,708                  | 195                          | 780          | 176                                   | 704          | 8,720                           | 34,880       |
| 5            |                                    |                        |                              |              |                                       |              | 7,320                           | 43,920       |
| 6            |                                    |                        |                              |              |                                       |              | 29                              | 203          |
| 7            |                                    |                        |                              |              | 159                                   | 1,272        | 2,761                           | 22,088       |
| 8            |                                    |                        |                              |              |                                       |              |                                 |              |
| 9            |                                    |                        |                              |              | 245                                   | 2,450        |                                 |              |
| 10           |                                    |                        |                              |              |                                       |              |                                 |              |
| 11           |                                    |                        |                              |              |                                       |              | 4,257                           | 59,698       |
| 12           |                                    |                        |                              |              |                                       |              |                                 |              |
| 13           |                                    |                        |                              |              |                                       |              |                                 |              |
| 14           |                                    |                        |                              |              |                                       |              |                                 |              |
| 15           |                                    |                        |                              |              |                                       |              |                                 |              |
| 16           |                                    |                        |                              |              |                                       |              |                                 |              |
| 17           |                                    |                        |                              |              |                                       |              |                                 |              |
| 18           |                                    |                        |                              |              |                                       |              |                                 |              |
| 19           |                                    |                        |                              |              |                                       |              | 9,109                           | 200,398      |
| 20           |                                    |                        |                              |              |                                       |              |                                 |              |
| 21           |                                    |                        |                              |              |                                       |              | 280                             | 7,280        |
| 22           |                                    |                        |                              |              |                                       |              |                                 |              |
| 23           |                                    |                        |                              |              |                                       |              |                                 |              |
| 24           |                                    |                        |                              |              |                                       |              |                                 |              |
| 25           |                                    |                        |                              |              |                                       |              |                                 |              |
| 26           |                                    |                        |                              |              |                                       |              |                                 |              |
| 27           |                                    |                        |                              |              |                                       |              |                                 |              |
| 28           |                                    |                        |                              |              |                                       |              |                                 |              |
| 29           |                                    |                        |                              |              |                                       |              |                                 |              |
| 30           |                                    |                        |                              |              |                                       |              |                                 |              |
| 31           |                                    |                        |                              |              |                                       |              |                                 |              |
| 32           |                                    |                        |                              |              |                                       |              |                                 |              |
| 33           |                                    |                        |                              |              |                                       |              |                                 |              |
| 34           |                                    |                        |                              |              |                                       |              |                                 |              |
| 35           |                                    |                        |                              |              |                                       |              |                                 |              |
| 36           |                                    |                        |                              |              |                                       |              |                                 |              |
| 37           |                                    |                        |                              |              |                                       |              |                                 |              |
| 38           |                                    |                        |                              |              |                                       |              |                                 |              |
| 39           |                                    |                        |                              |              |                                       |              |                                 |              |
| 40           |                                    |                        |                              |              |                                       |              |                                 |              |
| 41           |                                    |                        |                              |              |                                       |              |                                 |              |
| 42           |                                    |                        |                              |              |                                       |              |                                 |              |
| 43           |                                    |                        |                              |              |                                       |              |                                 |              |
| 44           |                                    |                        |                              |              |                                       |              |                                 |              |
| 45           |                                    |                        |                              |              |                                       |              |                                 |              |
| 46           |                                    |                        |                              |              |                                       |              |                                 |              |
| 47           |                                    |                        |                              |              |                                       |              |                                 |              |
| 48           |                                    |                        |                              |              |                                       |              |                                 |              |
| 49           |                                    |                        |                              |              |                                       |              |                                 |              |
| 50           |                                    |                        |                              |              |                                       |              |                                 |              |
| 51           |                                    |                        |                              |              |                                       |              |                                 |              |
| 52           |                                    |                        |                              |              |                                       |              |                                 |              |
| 53           |                                    |                        |                              |              |                                       |              |                                 |              |
| 54           |                                    |                        |                              |              |                                       |              |                                 |              |
| 55           |                                    |                        |                              |              |                                       |              |                                 |              |
| 56           |                                    |                        |                              |              |                                       |              |                                 |              |
| 57           |                                    |                        |                              |              |                                       |              |                                 |              |
| 58           |                                    |                        |                              |              |                                       |              |                                 |              |
| 59           |                                    |                        |                              |              |                                       |              |                                 |              |
| 60           |                                    |                        |                              |              |                                       |              |                                 |              |
| 61           |                                    |                        |                              |              |                                       |              |                                 |              |
| 62           |                                    |                        |                              |              |                                       |              |                                 |              |
| 63           |                                    |                        |                              |              |                                       |              |                                 |              |
| 64           |                                    |                        |                              |              |                                       |              |                                 |              |
| 65           |                                    |                        |                              |              |                                       |              |                                 |              |
| 66           |                                    |                        |                              |              |                                       |              |                                 |              |
| 67           |                                    |                        |                              |              |                                       |              |                                 |              |
| 68           |                                    |                        |                              |              |                                       |              |                                 |              |
| 69           |                                    |                        |                              |              |                                       |              |                                 |              |
| 70           |                                    |                        |                              |              |                                       |              |                                 |              |
| 71           |                                    |                        |                              |              |                                       |              |                                 |              |
| 72           |                                    |                        |                              |              |                                       |              |                                 |              |
| 73           |                                    |                        |                              |              |                                       |              |                                 |              |
| 74           |                                    |                        |                              |              |                                       |              |                                 |              |
| 75           |                                    |                        |                              |              |                                       |              |                                 |              |
| Total        | 14,663                             | 18,944                 | 195                          | 780          | 580                                   | 4,426        | 48,218                          | 399,851      |

| No. of duct. | Metropolitan R. R.<br>Co. |              | City and Suburban<br>R. R. Co. |              | Total.       |              |
|--------------|---------------------------|--------------|--------------------------------|--------------|--------------|--------------|
|              | Conduit.                  | Duct.        | Conduit.                       | Duct.        | Conduit.     | Duct.        |
|              | <i>Feet.</i>              | <i>Feet.</i> | <i>Feet.</i>                   | <i>Feet.</i> | <i>Feet.</i> | <i>Feet.</i> |
| 1            |                           |              |                                |              | 59,973       | 59,973       |
| 2            |                           |              |                                |              | 149,308      | 298,616      |
| 3            |                           |              |                                |              | 236          | 708          |
| 4            | 21,661                    | 86,644       | 11,040                         | 44,160       | 123,151      | 492,604      |
| 5            |                           |              | 5,117                          | 30,702       | 81,282       | 487,692      |
| 6            |                           |              |                                |              | 111          | 777          |
| 7            |                           |              | 13,248                         | 105,984      | 54,420       | 435,960      |
| 8            |                           |              |                                |              | 7,402        | 66,618       |
| 9            |                           |              |                                |              | 8,363        | 83,630       |
| 10           | 11,381                    | 136,572      | 8,030                          | 80,300       | 55,891       | 670,692      |
| 11           |                           |              | 77                             | 924          | 586          | 7,718        |
| 12           |                           |              | 1,880                          | 26,320       | 7,361        | 104,054      |
| 13           |                           |              |                                |              | 68           | 1,020        |
| 14           |                           |              |                                |              | 9,932        | 158,912      |
| 15           |                           |              |                                |              | 636          | 10,812       |
| 16           |                           |              | 2,214                          | 39,832       | 3,790        | 68,220       |
| 17           |                           |              |                                |              | 111          | 2,220        |
| 18           |                           |              | 134                            | 2,948        | 9,243        | 203,346      |
| 19           |                           |              |                                |              | 4,171        | 100,104      |
| 20           |                           |              |                                |              | 304          | 7,600        |
| 21           |                           |              |                                |              | 280          | 7,280        |
| 22           |                           |              | 87                             | 2,436        | 87           | 2,436        |
| 23           |                           |              |                                |              | 53           | 1,590        |
| 24           |                           |              |                                |              | 485          | 15,520       |
| 25           |                           |              |                                |              | 3,880        | 139,680      |
| 26           |                           |              | 193                            | 7,334        | 193          | 7,334        |
| 27           |                           |              |                                |              | 1,589        | 63,560       |
| 28           |                           |              |                                |              | 424          | 18,656       |
| 29           |                           |              |                                |              | 749          | 41,944       |
| 30           |                           |              |                                |              | 7            | 406          |
| 31           |                           |              |                                |              | 282          | 18,048       |
| 32           |                           |              |                                |              | 76           | 5,472        |
| 33           |                           |              |                                |              |              |              |
| 34           |                           |              |                                |              |              |              |
| 35           |                           |              |                                |              |              |              |
| 36           |                           |              |                                |              |              |              |
| 37           |                           |              |                                |              |              |              |
| 38           |                           |              |                                |              |              |              |
| 39           |                           |              |                                |              |              |              |
| 40           |                           |              |                                |              |              |              |
| 41           |                           |              |                                |              |              |              |
| 42           |                           |              |                                |              |              |              |
| 43           |                           |              |                                |              |              |              |
| 44           |                           |              |                                |              |              |              |
| 45           |                           |              |                                |              |              |              |
| 46           |                           |              |                                |              |              |              |
| 47           |                           |              |                                |              |              |              |
| 48           |                           |              |                                |              |              |              |
| 49           |                           |              |                                |              |              |              |
| 50           |                           |              |                                |              |              |              |
| 51           |                           |              |                                |              |              |              |
| 52           |                           |              |                                |              |              |              |
| 53           |                           |              |                                |              |              |              |
| 54           |                           |              |                                |              |              |              |
| 55           |                           |              |                                |              |              |              |
| 56           |                           |              |                                |              |              |              |
| 57           |                           |              |                                |              |              |              |
| 58           |                           |              |                                |              |              |              |
| 59           |                           |              |                                |              |              |              |
| 60           |                           |              |                                |              |              |              |
| 61           |                           |              |                                |              |              |              |
| 62           |                           |              |                                |              |              |              |
| 63           |                           |              |                                |              |              |              |
| 64           |                           |              |                                |              |              |              |
| 65           |                           |              |                                |              |              |              |
| 66           |                           |              |                                |              |              |              |
| 67           |                           |              |                                |              |              |              |
| 68           |                           |              |                                |              |              |              |
| 69           |                           |              |                                |              |              |              |
| 70           |                           |              |                                |              |              |              |
| 71           |                           |              |                                |              |              |              |
| 72           |                           |              |                                |              |              |              |
| 73           |                           |              |                                |              |              |              |
| 74           |                           |              |                                |              |              |              |
| 75           |                           |              |                                |              |              |              |
| Total        | 33,042                    | 223,216      | 42,020                         | 340,960      | 584,444      | 3,582,602    |

## REPORT OF THE INSPECTOR OF PLUMBING.

WASHINGTON, D. C., *September 11, 1901.*

CAPTAIN: I have the honor to submit the nineteenth annual report of the division of plumbing inspection for the fiscal year ended June 30, 1901.

## INSPECTION AND RECORDS.

The total number of inspections made during the year was 21,692, or, excluding 2,727 inspections of hydrants, 18,965, an increase of 1,560 over those of the previous year. These comprise 4,090 examinations of existing plumbing; 8,129 inspections of remodeling, extensions, and repairs; 3,318 inspections of plumbing in new buildings; 510 peppermint tests; 997 inspections of gas piping or gas fixtures; 707 inspections of lead water-service pipes; 601 sewer laterals tapped into main sewers; 179 new terra-cotta house sewers, and 420 repairs to terra-cotta sewers. The number of notices personally served upon property owners preparatory to prosecution was 14.

The office work performed shows a decrease, mainly due to the less number of hydrant notices issued and decrease in correspondence respecting hydrants. The number of letters written, orders and indorsements made, amounts to 2,823, the detail of which includes miscellaneous letters, 376; letters to master plumbers, 190; orders to repair plumbing or gas fitting, 525; hydrant repair or replacement notices, 787; indorsements on communications forwarded, 798; letters to the Engineer Commissioner and other District officials, 127, and specifications for plumbing work in District buildings, 20. Plumbing plans were examined and approved and certificates issued for 971 new buildings, which is a greater number than were under consideration in previous years.

## YARD HYDRANT INSPECTIONS.

The work of inspection of yard hydrants and the service and execution of notices upon defective fixtures of this type was continued with a diminished force of inspectors until the end of the fiscal year. The number of inspections of hydrants was 2,727; of repair notices issued, 682; of replacement orders, 105. The number of new hydrants installed was 584, and the cases in which the hydrant fixture was altogether removed, 42.

## PLUMBING REGULATIONS.

The revised plumbing regulations constituting the fourth edition took effect January 1, 1901, and the volume of inspections was materially increased by the new provisions. On account of the promulgation of the changes a number of months before the date of taking effect, the plumbers obtained advance information respecting the application of the various rules, so that little friction has been experienced in working under them, and but few changes have been required in work in progress.

The increase of peppermint tests from 194 in the previous year to the 510 recorded above indicates the increased work in six months, due to the requirement of final inspection upon each new house. It is believed to be necessary to substitute for the peppermint tests now in vogue a system of smoke tests as a final method of proving plumbing work.

## PLUMBING IN PUBLIC SCHOOLS.

Plans and specifications were prepared for the renovation of the plumbing in the Force, Grant, Gales, and Garnet school buildings.

The work in the Force school consisted in removing a defective vitrified pipe sewer from the basement and substituting a cast-iron line. There was also constructed a detached two-story-and-cellar toilet building, fully equipped with fixtures of advanced types, and provided with independent steam-heating apparatus. In the other three buildings general toilet facilities were introduced in the basement, and small fixtures provided on the upper floors. Porcelain drinking fountains, having the slab and back in one piece, and three faucet and waste outlets, were constructed for the first time and introduced into these buildings. There were also used double-stall ventilated urinals located in the center of the toilet rooms instead of along the side, which fixtures mark a considerable advance over those heretofore designed.

Arrangements have been made for the prosecution during the summer vacation of work upon the toilet rooms for the Lincoln, Mott, and Randall buildings, and the erection of a single structure containing a boiler room and toilet facilities for the Addison and Curtis schools.

## PROSECUTIONS.

Nineteen cases involving violation of the plumbing and gas-fitting laws were brought to the attention of the police court, 16 of which were for the violation of the plumbing laws, two for gas fitting by unregistered persons, and one for excavation in a public street without a permit. In 16 of these cases fines were imposed. One case was dismissed for lack of sufficient evidence to convict, one was nolle prossed by order of the Commissioners, and one plumber was released on personal bonds. The fines imposed were somewhat greater than in previous years, a fine of \$25 having been imposed in one case and \$20 in another, but in eight cases fines of \$5 each were imposed, and in one case of a second offense only \$10. It is therefore still my opinion that the penalties imposed are not sufficiently heavy to prevent repetitions of these offenses.

## PUBLIC-COMFORT STATIONS.

The need for the construction of a suitable number of public-comfort stations still exists and is more fully recognized by the District officials and the public generally than heretofore. The experience of the subcommittee in charge of these matters during the late inauguration ceremonies emphasizes the great necessity which occurs for such conveniences during occasions that bring together large numbers of people. The five stations erected by them were used by hundreds of persons.

Although I believe that a considerable number of such buildings should be at once provided, the question of sites is such a difficult one that I recommend that a beginning be made by the construction of a suitable building at the intersection of Seventh and C streets NW. with Louisiana avenue, in the space now under the control of the Commissioners. If it be deemed inadvisable to request an appropriation of \$18,000 for this purpose, an appropriation of at least \$1,000 should be asked to prepare plans, in order that the matter may be brought into a more advanced state of preparation.

## PERSONNEL.

I have to note with regret the resignation, on account of serious ill health, on October 21, 1900, of Nicholas J. Plass, one of the oldest inspectors in the service, whose fidelity to the trust reposed in him was unceasing. On October 29 Michael J. McCarthy was appointed to the vacancy. The resignation of Martin T. Conboy, on October 14, 1900, to accept a situation offering greater advancement, and the appointment of Jacob P. Stirewalt, on October 30, 1900, to the vacancy, marks another change in the force of the office.

The assistants have performed their increased duties throughout the year with uniform faithfulness, and are entitled to credit for the satisfactory character and increased number of inspections made. It is very difficult in performing inspections, in the short amount of time now available, to be certain that the work attains the high standard of workmanship and skill heretofore set.

I have to recommend, in connection with the estimates for the next year, the increase of the field force by two assistants. One is needed on account of the increased volume of work due to the great number of buildings under erection and the added attention devoted to the design of plumbing in District structures, and a second is required to conduct the work of final inspections and tests.

Very respectfully,

CHAS. B. BALL,  
*Inspector of Plumbing.*

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.  
(Through Captain Harding.)*

## REPORT OF THE PLUMBING BOARD.

WASHINGTON, D. C., *September 9, 1901.*

CAPTAIN: I have the honor to submit the following statement of the work of the plumbing board during the third year of its organization:

There were held during the year 25 sessions, most of which were devoted to the examination of candidates for master plumbers' licenses. There was no change in the personnel of the board or in its officers.

The total number of examinations conducted was 18. The number of original candidates examined was 8, of whom 3 passed. The number of those who had previously been examined was 10, of whom 3 passed.

The examinations throughout the year, with a single exception, were by the use of written questions and answers, and there is no division in the opinion of the board that such a method is far preferable to the oral one. No practical examination has yet been introduced, but it is hoped that provision may be made for the examination of candidates in this regard.

We request that an appropriation of \$226 be asked to provide tools and materials and fit up a room for the purpose of testing applicants for licensing as master plumbers as to their skill in the work of the trade.

Very respectfully,

JOS. R. QUINTER, *President*,  
CHAS. B. BALL, *Secretary*.

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,*  
*Engineer Commissioner District of Columbia.*  
(Through Captain Harding.)

### REPORT OF THE INSPECTOR OF BUILDINGS.

WASHINGTON, August 27, 1901.

CAPTAIN: I have the honor to submit herewith the annual report covering the transactions of the building department for the fiscal year ending June 30, 1901, together with recommendations for the fiscal year ending June 30, 1903:

*Statement of permits issued from June 30, 1900, to July 1, 1901.*

| Description.             | Number. | Value.      | Description.             | Number. | Value.    |
|--------------------------|---------|-------------|--------------------------|---------|-----------|
| Brick dwellings .....    | 571     | \$2,088,686 | Workshop (frame) .....   | 1       | 1,650     |
| Frame dwellings .....    | 163     | 295,197     | Greenhouse .....         | 5       | 3,265     |
| Brick repairs .....      | 808     | 801,968     | Engine and boilers ..... | 46      | 107,790   |
| Frame repairs .....      | 532     | 66,272      | Boiler house .....       | 3       | 26,100    |
| Apartment houses (brick) | 126     | 2,183,150   | Vault or underground     |         |           |
| Apartment houses         |         |             | construction .....       | 4       | 610       |
| (frame) .....            | 2       | 11,000      | Assembly hall (brick) .. | 1       | 18,000    |
| Stores (brick) .....     | 12      | 29,700      | Assembly hall (frame) .. | 1       | 150       |
| Stores (frame) .....     | 3       | 3,175       | Base ball park, stands,  |         |           |
| Stores and dwellings     |         |             | fences, etc. ....        | 1       | 10,000    |
| (brick) .....            | 14      | 68,940      | Athletic Park, stands,   |         |           |
| Stores and dwellings     |         |             | fences, etc. ....        | 1       | 15,000    |
| (frame) .....            | 3       | 3,200       | Grand stand .....        | 1       | 500       |
| Hotel .....              | 1       | 15,000      | Inaugural stands .....   | 47      | 34,400    |
| Office buildings .....   | 6       | 33,150      | Waiting room (frame) ..  | 2       | 530       |
| School .....             | 1       | 3,000       | Wood and coal yard ..... | 2       | 400       |
| Church (brick) .....     | 2       | 14,000      | Sheds (brick) .....      | 12      | 3,310     |
| Church (frame) .....     | 2       | 5,500       | Sheds (frame) .....      | 551     | 18,369    |
| Warehouse (brick) .....  | 6       | 23,500      | Minor repairs .....      | 2,037   | 18,333    |
| Warehouse (frame) .....  | 2       | 500         | Awnings .....            | 115     | 8,625     |
| Factory (brick) .....    | 7       | 65,000      | Fire escapes .....       | 17      | 8,874     |
| Factory (frame) .....    | 1       | 2,500       | Elevators .....          | 30      | 133,350   |
| Stable (brick) .....     | 33      | 37,839      |                          |         |           |
| Stable (frame) .....     | 20      | 14,983      | Total .....              | 5,199   | 6,194,680 |
| Workshop (brick) .....   | 7       | 18,525      |                          |         |           |



*Comparative statement for years 1900-1901.*

|                | New<br>build-<br>ings. | Repairs. | Dwell-<br>ings. | Apart-<br>ments. |
|----------------|------------------------|----------|-----------------|------------------|
| 1901 .....     | 1,057                  | 1,896    | 734             | 128              |
| 1900 .....     | 892                    | 1,520    | 650             | 58               |
| Increase ..... | 165                    | 376      | 84              | 70               |

Valuations of building operations:

|                |             |
|----------------|-------------|
| 1901 .....     | \$6,795,354 |
| 1900 .....     | 6,194,080   |
| Decrease ..... | 601,274     |

Number of permits issued, including buildings, repairs, and minor repairs, awnings, vaults, etc:

|                |       |
|----------------|-------|
| 1900 .....     | 4,318 |
| 1901 .....     | 4,595 |
| Increase ..... | 277   |

|                                                                         |    |
|-------------------------------------------------------------------------|----|
| Inspections made and applications disapproved .....                     | 55 |
| Inspections made, applications approved, and permits uncalled for ..... | 61 |

The following summary will show the distribution of improvements in the different sections of the District and the value of the same:

|                 | Buildings.  | Repairs.  |
|-----------------|-------------|-----------|
| Northwest ..... | \$2,226,530 | \$686,825 |
| County .....    | 1,832,928   | 89,436    |
| Northeast ..... | 689,755     | 42,143    |
| Southeast ..... | 258,142     | 39,551    |
| Southwest ..... | 98,676      | 26,512    |
| Total .....     | 5,106,031   | 884,467   |

The following are the receipts of the office for the past year:

|                                                 |         |
|-------------------------------------------------|---------|
| For building permits .....                      | \$3,545 |
| For awnings .....                               | 115     |
| For boilers, engines, ovens, and furnaces ..... | 46      |
| For stands, inaugural, etc. ....                | 47      |
| Total .....                                     | 3,753   |
| Received for year 1900 .....                    | 3,367   |
| Increase .....                                  | 386     |

In addition to the permits above enumerated miscellaneous permits were issued for which no fees are exacted, consisting of renewals of entrance steps, temporary structures for the use of builders in connection with new construction, and extra occupancy of public space for the temporary storage of building materials.

The volume of work this office has had to deal with has been attended to as promptly as it has been possible to do so, and, as the number of hours in an official day is not sufficient to meet the demands of the public for inspections, the corps of assistant inspectors have willingly worked beyond the official time allotted so as to comply with the request of the contractors and builders for inspection of trenches and foundations, in order to reduce to a minimum delays in construction.

Referring to the tabulated statement above of the building operations of the year, it will be observed that the number of apartment houses erected and now in course of construction is a feature which necessarily attracts attention in view of the great amount of capital invested in such buildings. That the owners of such buildings are satisfied with their investments is manifested by the great number now being erected in every section of the city, and the success heretofore met with in easily securing tenants to fill them will continue. My observation, however, and the records of this office show that the erection of private dwellings has been reduced in number, so that within the city limits there are still many vacant squares unimproved, and this is manifest in the immediate vicinity of the apartment houses.

Generally the structural features of buildings are far superior to those that prevailed several years ago, due to the more exacting details of the regulations and the supervision of construction rendered by this department. In connection with the subject above noted I desire to call your attention to that fact that in apartment-house construction for the fiscal year the sum of \$2,183,150 has been expended, while in the same period the erection of dwelling houses has amounted in valuation to \$2,088,686.

Adverse criticism has been indulged in to a large extent by the builders and others interested in building, due to the loss of time in having proposed projections beyond the building line approved within a reasonable time after application has been made therefor to this office. By act of Congress passed March 3, 1891, the extension of any building or buildings, or any part or parts thereof in the city of Washington, in the District of Columbia (now applicable to every part of the District) beyond the building line, and upon the streets and avenues, shall not be granted, except upon special application and with the concurrence of all of the Commissioners and the approval of the Secretary of War.

As the applications for projections as now made necessarily pass through many hands, the average time consumed before approval is secured is ten days. In order to prevent unnecessary delay in the construction of buildings pending approval of applications for projections, and solely as a privilege, the Commissioners have permitted excavations within building lines to proceed in advance of action on the question of projections. This privilege has unfortunately been abused in many instances and unauthorized excavations have been begun without the building lines. Complaint of the necessary delay in the granting of building permit involving projections beyond the building line should be reserved until builders no longer abuse the privilege granted them with the object of facilitating their operations.

The confusion now prevailing in house numbers in many parts of the District, especially in the suburbs, due to the subdivision of land into narrower lots than 20 feet in width, the limit first established for basing numbers and the erection of houses thereon, is a subject which must be corrected as quickly as possible. In partly improved squares it is manifest that the introduction of narrow houses affect existing numbers on buildings previously erected, and to eliminate the condition now prevailing, it is recommended that a commission, composed of two persons, be appointed, to whom a salary of \$1,000 each, per annum, be paid, so that the correction of the house numbers may be accomplished at the earliest practicable moment.

The present corps of assistants have been faithful and painstaking in the discharge of their duties assigned them, but, as the volume of work as heretofore stated has been large, they have cheerfully worked overtime to meet the demands made upon them.

In addition to the work of field inspection of construction this office has performed the task of reviewing all plans and the correction of specifications thereof, where necessary, for the several municipal buildings erected during the year. This work of reviewing the designs of the architects employed has been a great task in many cases and has consumed valuable time before the proposals for the execution of the work could be invited.

The contractors to whom the several buildings have been awarded have delivered them to the District in a satisfactory manner, and a disposition on their part to comply with the obligations of their contracts have always been manifested.

The buildings completed during the year and those still under construction are as follows:

#### BUILDINGS COMPLETED.

Truck house E; contractor, John Hughes, jr., of Baltimore, Md.; cost, \$15,974.  
Chemical engine house, Tenley; contractor, John Hughes, jr., Baltimore; Md.; cost, \$16,195.

Truck house F, Whitney avenue; contractors, Pavarini & Greer; cost, \$16,010.

Police station No. 10, Whitney avenue; contractors, Meads & Reynolds; cost, \$22,845.

Boys' Reform School, assembly hall, Bladensburg road; contractors, Pavarini & Greer; cost, \$11,460.

Dent School, South Carolina avenue and Second street SE.; contractor, J. M. Dunn; cost, \$33,980.

Webb School, Fifteenth and Rosedale streets NE.; contractor, J. M. Dunn; cost, \$33,885.

Birney School, Nichols avenue, Anacostia; contractors, Gleeson & Humphrey; cost, \$34,796.

Takoma Park School: contractor, Herman E. Burgess; cost, \$19,336.  
 Porch at Almshouse, Washington Asylum: contractor, D. F. Mockabee; cost, \$1,174.81.

NOW BEING CONSTRUCTED.

Manual Training School No. 1, Seventh street and Rhode Island avenue NW.; contractor, W. E. Speir; cost, \$105,680.

Manual Training School No. 2, P street, between First and Third streets NW.; contractor, Arthur Cowsill; cost, \$114,900.

Workhouse, rear wing, reservation No. 13, Washington Asylum; general contractor, W. E. Speir; cost, \$76,535.

Cell work, contractor, Pauly Jail Building and Manufacturing Company; cost, \$42,387.

Receiving ward, reservation 13, Washington Asylum; contractor, H. E. Burgess; cost, \$12,487.

Lovejoy School, Twelfth and D streets NE.; contractors, Pavarini & Greer; cost, \$34,400. Will be completed in September, 1901.

School building, Third and K streets SW.; contractor, J. M. Dunn; cost, \$35,719.

School building, One-half street, between N and O streets SW.; contractor, D. F. Mockabee; cost, \$38,743.

School building, Industrial Home School, Tenley road; contractors, Pavarini & Greer; cost, \$16,800.

School building, California avenue, Washington Heights; contractors, Pavarini & Greer; cost, \$35,200.

Engine house, Brookland; contractors, Burgess & Parsons; cost, \$6,317.

School building, Twining City; contractors, Gleeson & Humphrey; cost, \$22,340.

School building, Kenilworth; contractors, Pavarini & Greer; contract, \$22,515.

The superintendents of construction employed on the buildings above enumerated were as follows (compensation to July 1, 1901):

Edward Kern, truck house E; amount paid, \$44.

J. B. Bright, chemical engine house, Tenleytown; amount paid, \$692.

Philip Gormley, truck house F, Whitney avenue; amount paid, \$656.

Philip Gormley, police station No. 10; amount paid, \$320.

William J. Marsh, assembly hall, Boys' Reform School, appointed by the trustees, approved by Commissioners; amount paid, —.

Edward Kern, Dent School, Second street and South Carolina avenue SE.; amount paid, \$736.

E. G. Curtis, Webb School, Fifteenth and Rosedale streets NE.; amount paid, \$759.

L. E. Bond, Birney School, Anacostia; amount paid, \$769.50.

A. W. Brinck, Takoma Park School; amount paid, \$664.

John P. Healy, Manual Training School No. 1; amount paid, \$808. Appointed assistant inspector of buildings: P. F. Gormley now employed.

Harold Davis, Manual Training School No. 2; amount paid, \$956. Resigned; A. M. Poynton, now employed.

J. W. Bright, Lovejoy School, Twelfth and D streets NE.; amount paid, \$376. Now employed on workhouse.

L. E. Bond, Industrial Home School; amount paid, \$54. Transferred to Birney School, later to Manual Training School No. 2, and then to Lovejoy.

Frank McMaster, Industrial Home School, appointed in July, 1901.

George M. Thomas, school, Washington Heights; amount paid, \$32.

A. M. Proctor, engine house, Brookland; amount paid, \$28.

Since the 1st of July, 1901, contracts have been entered into for the construction of three school buildings, namely, one 4-room building in Petworth, one 8-room building on P street near North Capitol, and one 12-room building in Eckington.

The building regulations that were prepared by a commission of experts appointed by the Commissioners in 1896 have been found to be inadequate to meet the rapid improvement in building construction of the present day, and recognizing this fact, the Commissioners, in the early part of the year 1901, appointed a commission consisting of Capt. D. D. Gaillard, U. S. A., assistant to the Engineer Commissioner, and Assistant Inspector of Buildings Snowden Ashford to prepare such amendments as would meet the requirements of construction of the present day. This work has been completed and submitted to the Commissioners for their consideration.

Owing to the number of buildings recently erected approximating the limit of elevation allowed by the regulations, namely, 130 feet, and as there are others of this type now under consideration, and which no doubt will be erected in the near future, I wish to call your attention to the necessity of having a geological map

and sections of the District of Columbia, especially that portion within the old boundary lines of the city of Washington, prepared for use of this office, and from which reliable information can be given as to the character of the ground contemplated to be built upon. The data for this map, I believe, can be obtained from the office of the United States Geological Survey, and I respectfully request that the proper steps be taken to secure the preparation of this map.

As it is mandatory upon all applicants to make a subdivision of the land contemplated to be built upon, when other buildings exist upon the same numbered lot of land, for the proper administration of the business of this office and to reduce the loss of time of the applicants applying for such building permits, I have the honor to request that copies of all subdivisions of land be furnished to this office as soon as possible by the surveyor, District of Columbia, so that they may be properly filed in suitable form for ready reference.

Attention is invited to the appendix, which gives the report of the work performed by the assistant inspectors of buildings and elevators.

Very respectfully,

JNO. B. BRADY,  
*Inspector of Buildings.*

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.  
(Through Captain Harding.)*

WASHINGTON, D. C., August 8, 1901.

SIR: We have the honor to submit statement of our official duties as assistant inspectors of buildings during the fiscal year ending June 30, 1901:

|                                                         |        |
|---------------------------------------------------------|--------|
| Visits to new buildings.....                            | 12,868 |
| Visits to old buildings.....                            | 5,581  |
| Visits of a miscellaneous character.....                | 3,586  |
| Total, 1901.....                                        | 22,035 |
| Total, 1900.....                                        | 12,691 |
| Increase.....                                           | 9,344  |
| Condemnations of dangerous buildings, or parts thereof: |        |
| 1900.....                                               | 616    |
| 1901.....                                               | 579    |
| Decrease.....                                           | 37     |
| Number of buildings renumbered.....                     | 359    |

The increase in the actual number of visits is greater than in any previous year, in spite of the fact that members of your staff were again, as last year, broken down from overwork, much valuable time thus being lost.

The decrease in condemnations is not, as the above facts will prove, due from lack of attention to our official duties, but from the fact that more prosperous times have enabled the citizens to care for their properties by removal and repair, and also from the fact that one large building will now be erected in place of many small ones, as in previous years, thus decreasing the number of party-wall condemnations etc.

During the fiscal year just ended we have endeavored, with the limited force in the office, to perform the duties intrusted to us. Our experience has been varied from attending to the most trivial complaints to the supervision of the large mercantile, office, and apartment buildings in course of erection and repair. We find that it is impossible to cover the vast territory allotted to each man and give the proper time and attention to the inspection of buildings for which we are held responsible.

This having been the year of a Presidential inauguration, for two weeks prior to the 4th of March your entire staff of assistant inspectors were (in connection with their other duties) actively engaged day and night inspecting the construction of the many reviewing stands and superintending the work of reenforcing the balconies along and adjacent to the line of parade; not less than 2,000 premises were thus visited, and it is a matter of note that not one accident occurred through faulty or defective construction.

Your assistants find that a great amount of valuable time is consumed in writing notices and making official reports in the office, and if they are provided with

a stenographer the office work will be reduced, thereby giving more time to the inspection of work in the field.

Thanking you for your consideration and support at all times, we have the honor to remain.

Very respectfully,

RICHD. M. EVANS,  
CHAS. A. HARKNESS,  
HENRY STOREY,  
THOS. FRANCIS,  
*Assistant Inspectors of Buildings.*

Mr. JOHN B. BRADY,  
*Inspector of Buildings, District of Columbia.*

WASHINGTON, D. C., August 8, 1901.

DEAR SIR: I have the honor to report the work performed by the inspector of elevators and fire escapes for the fiscal year ending June 30, 1901:

|                                                           |       |
|-----------------------------------------------------------|-------|
| New elevators installed.....                              | 30    |
| Condemnations of elevators during installation.....       | 12    |
| Elevators examined.....                                   | 923   |
| Elevators condemned, for repairs.....                     | 261   |
| Fire escapes erected.....                                 | 17    |
| Fire-escape condemnations during erection.....            | 11    |
| Fire escapes ordered (compulsory).....                    | 3     |
| Steam boilers installed.....                              | 44    |
| Steam engines installed.....                              | 16    |
| Gas engines installed.....                                | 11    |
| Gasoline engines installed.....                           | 1     |
| Bake ovens erected.....                                   | 2     |
| Buildings examined under the fire-escape law.....         | 162   |
| Lights, gongs, and fire signals ordered in buildings..... | 6     |
| Heating apparatus examined.....                           | 43    |
| Miscellaneous condemnations.....                          | 72    |
| Total number of visits made.....                          | 1,562 |

I respectfully call your attention to the recommendation in my last year's report, suggesting the following amendments to the building regulations, and again urge the adoption of the same:

"For a better and more uniform method of construction and erection of elevators, I have the honor to recommend that section 198 of the regulations governing elevators be amended by striking out all matter of said section and inserting in lieu thereof, so as to make section 198 read as follows:

"SEC. 198. It shall be unlawful for any person or persons, company or corporation, to construct or erect, or cause to be constructed or erected, any elevator to be used for carrying passengers or freight from one floor to another, in any building erected, or that may be in the course of erection, without making application for permission therefor to the inspector of buildings; and before the inspector of buildings shall grant permission for the erection, construction, or use of such elevator, there shall be filed in his office, as a matter of record, plans and specifications showing the type and make of machine and motive power to be used, and the size of all ropes, sheaves, drums, and supporting beams; also speed, travel, and capacity of car, type of safeties, dimension of pressure tank, and pressure carried thereon, or the number of volts and amperes of electric current and motor used.

"The inspector of buildings shall not grant the permission intended by this section for the erection of any elevator that may have less than two ropes of approved diameter, carrying the weight of the car and its load, or each counter-balance weight thereof.

"Also after the word 'use,' in the last line of section 200, insert the following: 'The said certificate shall be placed under glass and framed and hung in a conspicuous place in the car of the elevator for which the certificate was issued.'

"And after the word 'every' in the third line of section 202 the word 'three' be stricken out, and the word 'six' be inserted in lieu thereof.

"Also strike out all of section 207 except the schedule of sizes, and insert in lieu thereof the following:

"SEC. 207. It shall be unlawful for the owner or owners, in fee or for life, of any building in the District of Columbia to maintain or cause to be maintained

any elevator for carrying passengers in the said building unless such elevator shall have at least two hoisting ropes attached thereto and two ropes attached to any counterweight used in connection with the elevator. All ropes will be independently fastened at their terminals.

"All doors approaching elevator shafts shall have safety locks of approved make, so that said doors will be closed when the elevator car is not at the floor where the said doors are located."

"I deem it advisable to urge the adoption of the foregoing amendments, because the regulations now in force are not sufficiently stringent to properly govern the construction and erection of elevators in the District of Columbia. This office has no record of the sizes of ropes, types of safeties, etc., in relation to elevators now in use. Heretofore the construction has been so at variance and very little time given to consider the carrying capacities of the car, the weights to be sustained, etc., that it has been practically impossible to get a uniform elevator service. I believe the amendments here submitted will materially assist in facilitating the regular inspections.

"The rapid increase in the number of elevators is making it practically impossible for one man to visit all the plants once in three months and make the necessary critical inspections to insure public safety."

I would respectfully call attention to the fact that so much of the time of the elevator inspector is now occupied in locating and inspecting heating apparatus, machinery, etc., that it is not possible for him to give the elevator service the attention necessary for the proper protection of the public safety. I would therefore recommend that a properly qualified person be appointed and assigned to the duty of inspection of heating apparatus, machinery, etc.

I would also recommend that the regulations governing elevators, fire escapes, and the location of machinery, heating apparatus, etc., be published in a separate volume, that will be smaller and much more convenient and serviceable for the use of those connected with these branches of work.

Thanking you for the many courtesies shown me in the performance of my official duties, and believing that the recommendations herein will tend to improve the efficiency of this department and better insure the public safety, I am,

Very respectfully, yours,

A. M. LAWSON,  
*Inspector of Elevators.*

Mr. JOHN B. BRADY,  
*Inspector of Buildings, District of Columbia.*

## REPORT OF THE SUPERINTENDENT OF REPAIRS.

WASHINGTON, September 24, 1901.

CAPTAIN: I have the honor to submit herewith a statement explanatory of the work accomplished during the fiscal year 1901, and showing as far as possible just how the various appropriations for repairs to municipal buildings were expended.

The greatest portion of the work was done in the summer months of July, August, and September, when the pay rolls carried more than 100 names. All kinds of repair work, such as carpentering, painting, tinning, paving, grading, whitewashing, plastering, etc., were accomplished by means of day-labor, while the kalsomining, steam fitting, mill and iron work were done under contract by local firms.

The appropriation of \$50,000 for "Repairs to school buildings, 1901," was distributed as follows:

| Name of school. | Amount expended. | Name of school.  | Amount expended. |
|-----------------|------------------|------------------|------------------|
| First division: |                  | Second division: |                  |
| Thomson .....   | \$65.47          | Seaton .....     | 301.99           |
| Franklin .....  | 3,552.31         | Polk .....       | 425.31           |
| Phelps .....    | 386.70           | Abbot .....      | 116.09           |
| Dennison .....  | 673.87           | Henry .....      | 1,729.27         |
| Force .....     | 860.64           | Eckington .....  | 388.25           |
| Adams .....     | 332.81           | Webster .....    | 543.87           |
| Harrison .....  | 265.00           | Twining .....    | 325.73           |
| Berret .....    | 117.90           | Morse .....      | 435.95           |
| Total .....     | 6,265.30         | Total .....      | 4,269.06         |

| Name of school.       | Amount expended. | Name of school.             | Amount expended. |
|-----------------------|------------------|-----------------------------|------------------|
| Third division:       |                  | Seventh division—Continued. |                  |
| Hilton .....          | \$674.35         | Brookland .....             | \$326.68         |
| Maury .....           | 655.80           | Ivy City .....              | 146.50           |
| Wallach .....         | 501.80           | Monroe .....                | 445.80           |
| Brent .....           | 159.56           |                             |                  |
| Carbery .....         | 523.90           | Total .....                 | 2,718.14         |
| Lenox .....           | 355.12           |                             |                  |
| Towers .....          | 324.81           | Eighth division:            |                  |
| Peabody .....         | 965.16           | Tyler .....                 | 157.48           |
| McCormick .....       | 108.67           | Buchanan .....              | 308.40           |
|                       |                  | Cranch .....                | 214.59           |
| Total .....           | 4,263.17         | Van Buren .....             | 355.90           |
|                       |                  | Van Buren Annex .....       | 90.45            |
| Fourth division:      |                  | Congress Heights .....      | 126.80           |
| Greenleaf .....       | 185.48           | Garfield .....              | 79.22            |
| Potomac .....         | 221.78           | Good Hope .....             | 48.05            |
| Smallwood .....       | 85.53            | Birney .....                | 196.03           |
| Amidon .....          | 154.32           | Burryville .....            | 168.86           |
| Bradley .....         | 499.12           | Bennings .....              | 46.70            |
| Jefferson .....       | 1,456.02         | Bennings Road .....         | 32.25            |
|                       |                  | Hubbard .....               | 968.25           |
| Total .....           | 2,602.25         |                             |                  |
|                       |                  | Total .....                 | 2,792.89         |
| Fifth division:       |                  | Ninth division:             |                  |
| Grant .....           | 870.91           | Briggs .....                | 346.87           |
| Fillmore .....        | 46.45            | Summer .....                | 1,185.35         |
| Curtis .....          | 1,125.06         | Magruder .....              | 476.22           |
| Threlkeld .....       | 169.90           | Stevens .....               | 551.80           |
| Corcoran .....        | 149.85           | Phillips .....              | 82.89            |
| Addison .....         | 399.64           | Garrison .....              | 290.47           |
| Jackson .....         | 73.75            | Wormley .....               | 112.40           |
| Weightman .....       | 227.75           |                             |                  |
| Toner .....           | 84.50            | Total .....                 | 3,046.00         |
| High Street .....     | 128.22           |                             |                  |
|                       |                  | Tenth division:             |                  |
| Total .....           | 3,276.03         | Cook .....                  | 226.98           |
|                       |                  | Garnet .....                | 1,304.59         |
| Sixth division:       |                  | Patterson .....             | 140.70           |
| Arthur .....          | 553.87           | Slater .....                | 538.66           |
| Blake .....           | 172.48           | Bannaker .....              | 663.80           |
| Hayes .....           | 482.94           | Jones .....                 | 285.86           |
| Blair .....           | 470.47           | Douglas .....               | 128.81           |
| Madison .....         | 606.46           | Logan .....                 | 723.56           |
| Pierce .....          | 144.91           |                             |                  |
| Taylor .....          | 182.05           | Total .....                 | 4,012.86         |
| Hamilton .....        | 168.58           |                             |                  |
| Langdon .....         | 114.25           | Eleventh division:          |                  |
| Gales .....           | 398.20           | Lincoln .....               | 384.20           |
|                       |                  | Randall .....               | 296.90           |
| Total .....           | 3,294.21         | Bell .....                  | 300.24           |
|                       |                  | Giddings .....              | 241.11           |
| Seventh division:     |                  | Bowen .....                 | 21.28            |
| Reservoir .....       | 65.30            | Ambush .....                | 397.34           |
| Chain Bridge .....    | 18.50            | Lovejoy .....               | 4.40             |
| Conduit Road .....    | 23.50            | Payne .....                 | 291.71           |
| Tenley .....          | 372.84           |                             |                  |
| Chevy Chase .....     | 26.91            | Total .....                 | 1,937.18         |
| Grant Road .....      | 19.00            |                             |                  |
| Brightwood .....      | 80.00            | High schools:               |                  |
| Brightwood Road ..... | 49.50            | Central .....               | 2,236.14         |
| Johnson .....         | 478.28           | Western .....               | 1,121.28         |
| Johnson Annex .....   | 92.95            | Eastern .....               | 550.84           |
| Wilson .....          | 130.96           | Business .....              | 322.82           |
| Mott .....            | 264.46           | Colored .....               | 546.98           |
| Bruce .....           | 142.26           |                             |                  |
| Fort Slocum .....     | 20.00            | Total .....                 | 4,781.06         |
| Woodburn .....        | 17.70            |                             |                  |

SUMMARY.

|                                        |             |
|----------------------------------------|-------------|
| Total accounted for .....              | \$43,204.15 |
| Horse and driver .....                 | 707.60      |
| Office salaries .....                  | 2,093.75    |
| Salary of inspector of janitors .....  | 646.75      |
| Hardware, lumber, etc., in stock ..... | 2,000.00    |
| Miscellaneous and emergency work ..... | 1,437.75    |
| Total .....                            | 50,000.00   |

One hundred and ten school buildings, city and suburban, received attention, but on account of the limited appropriation all the requests of each school could not be met, only the most pressing needs being cared for.

Two hundred and fifteen orders were given for repairs to plumbing, amounting to \$2,435.16 (charged to "Repairs to plumbing public schools, 1901").

The appropriation of \$4,500 for "Repairs to engine houses, 1901," was expended as follows:

|                    |          |                     |          |
|--------------------|----------|---------------------|----------|
| Engine No. 1.....  | \$414.09 | Engine No. 12.....  | \$506.77 |
| Engine No. 2.....  | 41.02    | Engine No. 13.....  | 112.10   |
| Engine No. 4.....  | 97.63    | Engine No. 14.....  | 39.88    |
| Engine No. 5.....  | 116.81   | Engine No. 15.....  | 200.96   |
| Engine No. 6.....  | 263.16   | Chemical No. 1..... | 74.34    |
| Engine No. 7.....  | 327.92   | Truck A.....        | 70.03    |
| Engine No. 8.....  | 306.01   | Truck B.....        | 96.33    |
| Engine No. 9.....  | 220.68   | Truck C.....        | 19.13    |
| Engine No. 10..... | 176.49   | Truck D.....        | 410.59   |
| Engine No. 11..... | 470.65   | Truck E.....        | 24.00    |

## SUMMARY.

|                                    |            |
|------------------------------------|------------|
| Total accounted for .....          | \$3,988.59 |
| Office salaries and supplies ..... | 110.00     |
| Extra and emergency work .....     | 401.41     |

Total..... 4,500.00

These repairs consisted in part of new granolithic floors, new stalls, plumbing, tinning, painting, and carpentering, but here, also, owing to the small appropriation, all the houses could not be repaired in a thorough manner.

The appropriation of \$5,000 for "Repairs to police stations, 1901," was expended as follows:

|                    |          |                           |          |
|--------------------|----------|---------------------------|----------|
| Station No. 1..... | \$234.69 | Station No. 6.....        | \$156.85 |
| Station No. 2..... | 703.29   | Station No. 7.....        | 388.83   |
| Station No. 3..... | 994.01   | Station No. 8.....        | 322.39   |
| Station No. 4..... | 379.10   | Station No. 9.....        | 421.42   |
| Station No. 5..... | 306.74   | Anacostia Substation..... | 27.00    |

## SUMMARY.

|                                  |            |
|----------------------------------|------------|
| Total accounted for .....        | \$3,934.32 |
| Salaries and stock on hand ..... | 350.00     |
| Extra and emergency work .....   | 715.68     |

Total..... 5,000.00

The repairs here made were mainly of the same character as those for schools and engine houses.

The appropriation of \$2,250 for "Repairs to markets, 1901," was expended as follows:

|                 |          |
|-----------------|----------|
| Eastern .....   | \$359.32 |
| Western .....   | 1,398.33 |
| Georgetown..... | 17.95    |

## SUMMARY.

|                                  |            |
|----------------------------------|------------|
| Total accounted for .....        | \$1,775.60 |
| Extra and emergency work .....   | 324.40     |
| Salaries and stock on hand ..... | 150.00     |

Total..... 2,250.00

In addition to the work done under the above-mentioned appropriations, the annual appropriation of \$800 was expended on repairs to the Police Court. Repairs were also made at the Smallpox Hospital, District of Columbia Building, Industrial Home School, Property Yards, House of Detention, etc., amounting to more than \$3,000.

Respectfully,

Capt. LANSING H. BEACH,  
Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.  
(Through Captain Harding.)

G. B. COLEMAN,  
Superintendent of Repairs.



## REPORT OF THE INSPECTOR OF ASPHALT AND CEMENTS.

WASHINGTON, July 25, 1901.

CAPTAIN: The work of testing done in this office during the fiscal year ending June 30 may be summarized as follows:

*Testing.*

|                                          |        |
|------------------------------------------|--------|
| Hydraulic cements:                       |        |
| Natural, brands 8, samples.....          | 5,315  |
| Portland, brands 5, samples.....         | 6,610  |
| Asphalts:                                |        |
| Trinidad, crude, 6 cargoes, samples..... | 40     |
| Trinidad, refined.....                   | 6      |
| Asphaltic cements, samples.....          | 111    |
| Residuum oils.....                       | 26     |
| Surface mixtures.....                    | 107    |
| Miscellaneous asphalts.....              | 95     |
| Sands.....                               | 15     |
| Gravels.....                             | 6      |
| Gasolines.....                           | 6      |
| Bricks.....                              | 105    |
| Waters.....                              | 25     |
| Oils.....                                | 9      |
| Miscellaneous, experiments, etc.....     | 60     |
| Total.....                               | 12,533 |

## HYDRAULIC CEMENTS.

The number of barrels inspected and the average results of tests of each brand of cement will be found in the following tables.

*Natural cements.*—The 5,315 samples represent 53,101 barrels, of which 7,498 barrels were rejected.

*Natural cements.*

| Brand.                       | Number of barrels. | Number of samples. | Per cent residue, 100-mesh sieve. | Initial set, minutes. | Per cent water used. |               | Temperature of air and water ° F. | Tensile strength. |         |                       |
|------------------------------|--------------------|--------------------|-----------------------------------|-----------------------|----------------------|---------------|-----------------------------------|-------------------|---------|-----------------------|
|                              |                    |                    |                                   |                       | Neat cement.         | 2 parts sand. |                                   | Neat cement.      |         | 2 parts sand, 7 days. |
|                              |                    |                    |                                   |                       |                      |               |                                   | 1 day.            | 7 days. |                       |
| Cumberland .....             | 5,297              | 529                | 18                                | 19                    | 30.3                 | 14.4          | 74                                | 154.9             | 216.3   | 152                   |
| Cumberland and Potomac ..... | 3,114              | 311                | 16.7                              | 14                    | 31.6                 | 14.5          | 75                                | 155               | 255.2   | 161.5                 |
| Cumberland Valley .....      | 18,787             | 1,878              | 18                                | 19                    | 30.7                 | 14.3          | 75                                | 101               | 168     | 81.6                  |
| Potomac .....                | 19,149             | 1,914              | 15.6                              | 19.1                  | 32.8                 | 14            | 75.7                              | 89.3              | 147     | 85.5                  |
| Round Top .....              | 4,114              | 411                | 18.6                              | 16                    | 30                   | 14            | 77.5                              | 113               | 195     | 121                   |
| Shepherdstown .....          | 130                | 13                 | 9                                 | 19                    | 31                   | 14            | 73                                | 87                | 166     | 107                   |
| Shield .....                 | 1,591              | 159                | 10                                | 66                    | 25                   | 12            | 72                                | 146               | 217     | 120                   |
| Union .....                  | 919                | 100                | 9                                 | 15                    | 29                   | 13            | 74                                | 100               | 169.3   | 103.3                 |

*Portland cements.*—The 6,610 samples of Portland cement represent 66,118 barrels, of which 5,018 were rejected.

*Portland cements.*

| Brand.    | Number of barrels. | Number of samples. | Per cent residue, 100 mesh sieve. | Initial set. | Per cent water used. |               | Temperature of air and water. | Tensile strength. |         |                       |
|-----------|--------------------|--------------------|-----------------------------------|--------------|----------------------|---------------|-------------------------------|-------------------|---------|-----------------------|
|           |                    |                    |                                   |              | Neat cement.         | 3 parts sand. |                               | Neat cement.      |         | 3 parts sand, 7 days. |
|           |                    |                    |                                   |              |                      |               |                               | 1 day.            | 7 days. |                       |
| Atlas     | 11,308             | 1,130              | 7.5                               | <i>h. m.</i> | 18                   | 8.6           | 75                            | 553.4             | 816.1   | 300                   |
| Lehigh    | 17,260             | 1,726              | 8                                 | 2 33         | 18.5                 | 9             | 75                            | 382.9             | 827.5   | 319.4                 |
| Nazareth  | 3,335              | 333                | 5                                 | 3 00         | 19                   | 8             | 73                            | 355.5             | 731     | 257.5                 |
| Star      | 7,100              | 710                | 11                                | 3 00         | 20                   | 8.3           | 80                            | 486.5             | 640.3   | 251                   |
| Vulcanite | 2,115              | 211                | 7.8                               | 2 00         | 20                   | 9             | 78                            | 394.5             | 829.5   | 320                   |

## ASPHALT PAVING.

The contract to lay asphalt pavements for the past fiscal year was awarded to the Barber Asphalt Paving Company. Trinidad Lake asphalt was used exclusively in this work.

Work has also been done by the Cranford Paving Company under their contract for repairing asphalt pavements.

The Trinidad Lake asphalt, as formerly, has been imported by the Barber Asphalt Paving Company in the crude state, and refined and manufactured into paving cement for their own use and that of the Cranford Paving Company.

During the past year 40 samples of the crude Trinidad asphalt have been received, representing 6 cargoes. The asphalt received has been uniform in composition, as in former years, the maximum, minimum, and average being, respectively, 53.78, 52.34, and 53.31 per cent bitumen soluble in carbon disulphid.

It is to be regretted that this asphalt is so badly acted on by the water, and it is no exaggeration to say that nine-tenths of the repairs that have to be made to the Trinidad pavements are made necessary by the destruction of this asphalt by moisture.

This disintegration has been proven without a doubt to be due to the presence of soluble salts in the asphalt left there from the evaporation of the concentrated mineral water that makes up nearly one-third of the crude asphalt.

Mr. Clifford Richardson, in his report to the Engineer Commissioner of the District of Columbia for the year ending June, 1890, says of this water:

"It has all the characteristics of a strong thermal water and contains over 2 per cent of salts in solution. It is acid in reaction, effervescing strongly with carbonates. \* \* \* The effect of this acid water can not be a desirable one upon the bitumen nor the presence of such a large proportion of salts which in one of the large stills must amount to about a quarter of a ton of common salt and sodium sulphate."

Mr. W. S. Wilkinson, president of the International Paving Company, says, in speaking of his experiments to render Trinidad Lake asphalt unacted on by water:

"I have found that when what is known as dried or refined asphalt, which has been produced from a crude asphalt containing appreciable percentages of soluble salts and nonbituminous organic matter (which are not eliminated in the process of drying or so-called refining, and are therefore found in an increased percentage to the whole in the dried or refined asphalt) is for some hours immersed in water it will begin to exhibit disintegration and the formation of a scum or detritus upon its surface, and that this disintegration will continue for some hours to an apparently constantly increasing extent, but that in the course of a few days at most it will nearly, if not quite, cease.

"I have further found that if this soft detritus is gently scraped off with a dull-edged instrument, and the refined or dried asphalt be then replaced in water, the same action will immediately begin, and that, after further immersion for a corresponding period, an equal quantity of detritus will be formed, and further that if the operation be repeated sufficiently often, the entire mass of the original piece of asphalt will be disintegrated and changed into the form which I have termed scum or detritus. This scum or detritus has hitherto been regarded as decayed or destroyed asphalt, worthless for useful purposes.

"I have, moreover, found that the asphalt is not only not in the slightest degree injured by this breaking up of its structure, but that upon the contrary its worst, if not its only detrimental elements are removed from it by the action of the water, and that if the detritus be melted, the resulting agglomerate will be a better and a more refined asphalt than that from which it itself was derived.

"In proof of this assertion it is only necessary to place a piece of the remelted detritus in water, and it will be found that it is not only not affected at all, but that the surface will for an indefinite period remain 'bright' and clean."

The complaints of pavements rotting from water is heard from many sources and the difference between Trinidad and the other asphalts is now well recognized in this respect. Numerous plans have been devised to take the water from such pavements and keep them as dry as possible, such as putting in brick gutters and putting blind drains under the concrete base when the subgrade is likely to be wet. But now that it has been practically demonstrated that the cause for the rotting of the asphalt can be removed by a lately devised process with but a slight addition to the expense of refining, it is only proper that we should require the same to be done before allowing the asphalt to be used.

I would recommend the insertion of a clause in the specifications for asphalt paving for the next fiscal year requiring that the asphalt cement should be practically unacted on by water.

*Petroleum residuum.*—During the year 26 samples of residuum oils were received

to be used as fluxes for asphalts, assigned as follows: Barber Asphalt Paving Company, 23; Cranford Paving Company, 3.

During the first part of this fiscal year the residuum furnished to the Barber Asphalt Paving Company was received from the refinery of the Standard Oil Company situated at Lima, Ohio. This residuum has been used here for the past few years, but it has not been satisfactory owing to its containing large quantities of solid paraffin, which necessitated the addition of large quantities of the residuum in fluxing the asphalt to obtain a cement of sufficient softness. On a complaint made a few months ago from this office the above company changed the source of supply of their residuum and are now receiving it from the Standard Oil Company refinery situated at Constable Hook, New Jersey. This new residuum is derived from the Pennsylvania oils and is much more fluid, while at the same time loses but little more on heating at high temperatures than does the residuum from Lima, Ohio.

When it took 23 pounds of the old residuum to 100 pounds of refined Trinidad Lake asphalt to produce a desirable paving cement, we now make as soft a cement with but 19 pounds of the new residuum to the 100 pounds of refined asphalt, and the latter cement is of better quality, being less susceptible to changes in temperature and more ductile.

*Asphalt cements.*—The results of the tests made on the samples of asphalt cements received during the year will be found in the following table:

*Penetrations of asphalt topping and binder during fiscal year ending June 30, 1901.*

|                                | Topping.           |               |          |            | Binder.            |               |          |            |
|--------------------------------|--------------------|---------------|----------|------------|--------------------|---------------|----------|------------|
|                                | Number of samples. | Penetrations. |          |            | Number of samples. | Penetrations. |          |            |
|                                |                    | High-est.     | Low-est. | Aver- age. |                    | High-est.     | Low-est. | Aver- age. |
| Barber Asphalt Paving Co. .... | 25                 | 50            | 38       | 42.5       | 2                  | 80            | 73       | 76.5       |
| Cranford Paving Co. ....       | 82                 | 52            | 34       | 41.1       | 2                  | 82            | 84       | 83         |

*Asphalt surface mixtures.*—During the past year 107 samples were submitted by the two paving companies. The following table shows the maximum, minimum, and average per cent bitumen found in the surface mixtures, and also the average mesh composition of the sands used in same during the year.

|                                           | Barber Asphalt Paving Co. | Cranford Paving Co. |
|-------------------------------------------|---------------------------|---------------------|
| Number of samples. ....                   | 25                        | 82                  |
| Average per cent bitumen. ....            | 10.97                     | 11.4                |
| Lowest per cent bitumen. ....             | 10                        | 9.9                 |
| Highest per cent bitumen. ....            | 12.4                      | 12.5                |
| Sand: Per cent retained on sieves having— |                           |                     |
| 20-mesh per linear inch. ....             | 7.5                       | 4.6                 |
| 40-mesh per linear inch. ....             | 23.3                      | 34.9                |
| 60-mesh per linear inch. ....             | 20                        | 34.9                |
| 80-mesh per linear inch. ....             | 17                        | 13.3                |
| 100-mesh per linear inch. ....            | 11.3                      | 7                   |
| Passing 100-mesh per linear inch. ....    | 20                        | 16.2                |

*Miscellaneous asphalts.*—Under this heading is included a collection of 91 samples of asphalts presented by the United States Geological Survey; samples of refined asphalt and asphalt flux presented by the Globe Asphalt Company, of Pittsburg, Pa.; sample of refined asphalt and asphalt cement presented by the Warner Quinlan Asphalt Company, of Syracuse, N. Y., and samples of crude asphalt and asphalt flux presented by the Brennan Construction Company, of Washington, D. C. The 91 samples of asphalt presented by the Geological Survey are specimens collected by George H. Eldridge, field geologist, during his recent investigation of the asphalt deposits of the United States and represent the average run of these various deposits. Work is in progress on this collection, but the examination is hardly completed as yet.

The samples of refined and liquid asphalt presented by the Globe Asphalt Company are from Obispo, Cal. The laboratory examinations indicates that a proper mixture of the refined and flux will produce a paving cement that will prove one of the best on the market.

The sample of refined asphalt presented by the Warner Quinlan Company was

refined from the Trinidad land asphalt at the refinery of this company at Tremley Point, N. J. An examination of an asphalt cement made by fluxing this asphalt with a good quality of petroleum residuum showed it to be equal in quality to the asphalt cement used in paving in the District of Columbia during the past few years.

The sample of crude asphalt presented by the Brennan Construction Company is mined near Bejucal, about 20 miles from Havana, Cuba, by the West Indies Company, of New York, while the asphaltic flux is manufactured by the Sunset Oil Refining Company, of Obispo, Cal. A proper combination of this asphalt and flux produce a cement that from all indications will rank among the best for paving.

No really new methods for the examination of asphalt have developed during the past year, but considerable attention has been given to the perfecting and further development of tests that time has proven of practical value for the comparison and rating of asphalts for paving.

I am of the belief that it will not be long before we will be able to fix numerical standards in our specifications that will insure the selection of a suitable paving cement. I say this because it is pretty well understood what is required, and the tests for these requirements are being worked up in a satisfactory manner.

(1) We know that we require a pavement cement that will be so ductile at the minimum temperature obtained in the climate in which the pavement is to be laid that it will permit the contraction of the pavement without cracking;

(2) That at the same time the cement must not be so softened by the maximum temperature of the climate that would make a pavement that would roll or mark badly in summer;

(3) This cement must be able to withstand the heating to which it will be subjected in the process of manufacture of the pavement without having its physical properties materially changed; and

(4) That this cement should not be so rapidly changed with aging as to produce a pavement that would be injuriously hardened in an unreasonably short time.

When these four points can be accurately determined and a numerical standard specified for each, we will then be able to write satisfactory specifications for asphalt paving cement.

The first point can be ascertained by determining the ductility of the cement at low temperature. This test has not as yet been satisfactorily developed, but there is every reason for believing that it will be in the near future. The second point, the softening of a cement at high temperature, can be accurately determined by ascertaining its penetration at a high temperature. The third, the change brought about by more or less prolonged heating in the consistency of the cement, can be determined by exposing cements under examination to a high temperature for some fixed time and always under the same conditions. The fourth, the aging of the cement, is still determined by the method given in my report for the fiscal year ending June 30, 1897. This method is very unsatisfactory, and is not, of course, practical if you are limited to time, but I am of the belief that a more expeditious method will shortly be obtained.

I will here repeat what I said several years ago, that the so-called chemical examinations or tests by solution in different solvents on asphalts are absolutely worthless, with our present knowledge, as a means of indicating the suitability of an asphalt or asphalt cement for paving. It is possible to have several asphaltic materials which would all show on analysis the same percentage of the so-called retene, petrolene, and asphaltine, and yet would all differ materially in their physical properties. It is true that the per cent of petrolene in different samples of the same asphaltic cement will indicate approximately the consistency of the several cements, but why resort to this test which has to be worked with the greatest care to insure anything like concordant results and take several days to execute, when the information sought after can be ascertained with greater accuracy in less than an hour by means of the penetration test.

#### A SIMPLE FORM OF PENETRATION MACHINE.

In a previous report (Report of the Operations of the Engineer Department of the District of Columbia for year ending June 30, 1898, p. 127) a new apparatus was described for determining the penetration of asphaltic cements. This apparatus differed from the old Bowen penetration machine in that the tests were made under conditions and with standards of time, weight, and measurement that could be easily duplicated, thus insuring concordant results with all machines constructed on the same general principle. This apparatus as described has proved very useful for the laboratory in experimental work and when great accuracy was necessary in the comparison of several samples of cement, but it was recognized as being too cumbersome and as requiring too great care in manipulation to answer as

a machine that would be practical at a paving yard in the hands of a busy foreman or his assistant. A much simpler machine was designed about two years ago to fill this want and being constructed on the principle of the other, thus allowing the use of the same standards, the two machines give results that are concordant. Machines of this type have given such satisfaction in the hands of inspectors at the paving yards in this city and at several paving yards and cities that a description may prove of interest.

The standards that I have adopted with this machine are: Test made at a temperature of 32° F. or lower; the distance in one-hundredths of a centimeter that a No. 2 needle will penetrate into the sample in one minute of time when weighted with 200 grams. For tests made at a temperature of 77° F.; the distance in one hundredths of a centimeter that a No. 2 needle will penetrate into the sample in five seconds of time when weighted with 100 grams. For tests made at a temperature of 100° F., or above; the distance in one-hundredths of a centimeter that a No. 2 needle will penetrate, in five seconds of time weighted with 50 grams.

The object of the penetration test is to ascertain the softness of asphalt, etc., and is accomplished by determining the distance a weighted needle will penetrate into the specimen under examination.

If it is desirable that all tests be comparable, a standard needle should be used weighted with a definite weight. The tests should be made on samples at a standard temperature and be made for the same length of time in every case.

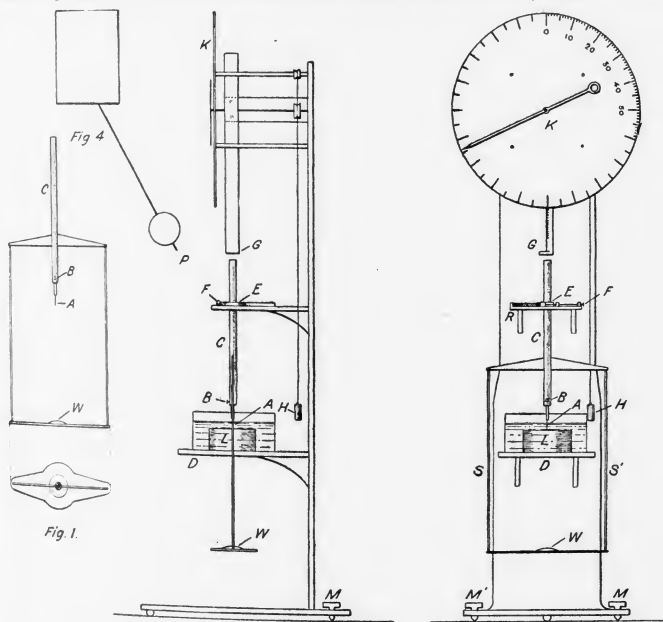


Fig. 2.

Fig. 3

In fig. 1 is shown the No. 2 needle, A, inserted in a short brass rod which is held in an aluminum rod, C, by the binding screw, B. The aluminum rod is secured in a framework so weighted and balanced that when it is supported on the point of the needle, A, the framework and rod will stand in an upright position, allowing the needle to penetrate perpendicularly without the aid of a support.

The frame, aluminum rod, and needle weigh 50 grams; additional weight, when desired, are screwed on the bottom of the frame at W.

In figs. 2 and 3 are shown the side and front views of the entire apparatus put together and ready for making a penetration. D is a shelf for the sample. E is a clamp to hold the aluminum rod, C, until it is desired to make the test. F is a button which when pressed opens clamp, E. By turning this button while the clamp is being held open, it will lock and keep the clamp from closing until unlocked. The device to measure the distance penetrated by the needle consists of a rack, the foot of which is G. The movement of this rack up or down turns a pinion to which is attached the hand which indicates on the dial, K, the distance

moved by the rack. One division of the dial corresponds to a movement of the rack of one one-hundredth of a centimeter. H is a weight hung by a coarse thread which winds on a drum on the axle of the spindle and counterbalances the rack, so that the rack can be raised or lowered by moving this counterweight, H, up or down. L is the tin box containing the sample to be tested, which is covered with water in a glass cup, thus keeping its temperature constant. M, M are leveling screws.

Fig. 4 represents a clock movement having a 10-inch pendulum attached to the wall to one side of the machine, used for timing the test.

Make a mark, P, on the wall just at the extremity of the swing of the pendulum. A double swing of this pendulum—that is, from the time it leaves P until it returns—is one second.

The only other things necessary to complete the outfit are a large dish pan, a pitcher to hold ice water, and a tin for hot water—an old coffeepot is a good thing.

To make penetration tests, place the materials contained in circular tins, along with the glass dish, in the dish pan under 5 or 6 inches of water, which should have been previously brought to the temperature desired by the addition of hot or cold water. While the samples are under the water it should be stirred every few minutes, best with a thermometer, and the temperature kept constant when necessary by the addition of hot or cold water, as the case may require. The samples should remain under the water at least fifteen minutes, and in cases where they are very hot or cold or the temperature of the water is not near normal, for at least one-half hour. The most expeditious way to proceed in testing a sample just taken from a still is to immerse it in ice water as soon as it has hardened sufficiently and keep it there for ten minutes, when it is placed in the water of the desired temperature for the test. After the samples have remained in the water for sufficient time, they are ready to penetrate.

One of the samples should now be placed in the glass cup and removed in it, covered with as much water as convenient without spilling.

The glass cup containing sample is placed on shelf D, under C, as shown in figs. 2 and 3. Insert brass rod with needle into C and secure by tightening binding screw B. Lower C until the point of needle very nearly touches surface of sample; then, by grasping the frame with two hands at S and S', fig. 3, cautiously pull down until needle is just in contact with surface of sample. This can be best seen by having a light so situated that looking through the sides of the glass cup the needle will be seen reflected in the surface of the sample.

After thus setting the needle, raise counterweight H slowly until the foot of rack G rests on the head of rod C; note reading of the dial. Place thumb of right hand on R and press button F with forefinger, thus opening clamp. Hold open for the desired time, and then allow it to close. Raise counterweight H as before until foot of rack rests on rod C. The difference between the former reading of the dial and the present is the distance penetrated by the needle, or the penetration of the sample. Raise rack, loosen binding screw B, raise rod through clamp, leaving the needle sticking in sample. Remove needle from sample, clean well by passing through a dry cloth, replace needle in C, and the machine is ready for another test.

For further information on this test I would refer to the reports of this office for the years ending June 30, 1897, and June 30, 1898.

#### BRICKS.

During the year 105 samples of brick were submitted by the building inspector and superintendent of bridges, and determinations were made on them for the percentage of water absorbed and specific gravity, and the reports made to the respective departments.

#### WELL WATERS.

During the year 25 samples of well water were submitted by the water department. These samples were analyzed and the results reported to that department.

#### MISCELLANEOUS SAMPLES.

Under this head are included, among other things, some tests on the effect of freezing under different conditions on both natural and Portland cement mortars. It was found that less harm is done to cement than is generally supposed. Further tests are under way and will be reported when the results are more complete.

Very respectfully,

A. W. Dow,  
*Inspector of Asphalt and Cements.*

Capt. LANSING H. BEACH,  
*Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.*

## REPORT OF THE ASSISTANT ENGINEER IN CHARGE OF STREET EXTENSIONS.

WASHINGTON, August 7, 1901.

CAPTAIN: I have the honor to submit the following report of the work of this office for the fiscal year ended June 30, 1901:

The work of preparing plans for a permanent system of highways having been finished during the latter part of the fiscal year 1900, it was then found necessary to reduce the street-extension force, and during the past year the work of this office has been done by myself and one assistant. All field work pertaining to the permanent system of highways is now performed by the surveyor of the District of Columbia, and the preparation of maps and data for condemnation proceedings have been based on surveys formerly made under my directions.

During the past year juries have passed and reported on the following extensions as authorized by various acts: Columbia road extended east of Thirteenth street; the widening of Columbia road and old Sixteenth street; the extension of Stanton street; the extension of Howard avenue; the extension of Sixteenth street from Morris street to the District line.

Blue prints, special maps, and calculations relating to these extensions were prepared by this office for the use of the juries in these proceedings.

Grade studies relating to proposed highways or the opening of new streets have been made from time to time as circumstances have required.

A set of maps drawn to a scale of 1 inch to 100 feet, which were formerly compiled from surveys of this office and from records in the office of the surveyor, District of Columbia, have been brought to date and a contract made for lithographing 75 of the number.

The following table is submitted as information relating to the condemnation of cert in streets and avenues covering a period of the last two fiscal years.

Very respectfully,

WM. P. RICHARDS,  
Assistant Engineer.

Capt. LANSING H. BEACH,  
Engineer Commissioner District of Columbia.

## Street extension condemnations for two years.

| Highway                                  | Act                             | Date of award.   | Date of confirmation. | Damages.     | Benefits.   | Court file. |
|------------------------------------------|---------------------------------|------------------|-----------------------|--------------|-------------|-------------|
| Rhode Island avenue                      | No. 43, approved Feb. 10, 1899. | 1899.<br>Dec. 1  | 1900.<br>Jan. 27      | \$96,617.00  | \$48,308.50 | 544         |
| Nineteenth street                        | No. 73, approved Feb. 25, 1899. | Feb. 25          | 1899.<br>Oct. 30      | 64,000.00    | 32,000.00   | 537         |
| S. Twenty-second, and Decatur streets.   | No. 135, approved Mar. 3, 1899. | Aug. 30          | Nov. 18               | 52,000.00    | 26,000.00   | 549         |
| Twentieth street                         | No. 225, approved Mar. 3, 1899. | June 12          | July 21               | 7,000.00     | 3,500.00    | 546         |
| Eleventh street                          | No. 195, approved Mar. 3, 1899. | 1900.<br>Feb. 16 | 1900.<br>July 3       | 269,120.00   | 134,565.00  | 556         |
| Sherman avenue.                          | No. 225, approved Mar. 3, 1899. | May 1            | (1)                   | 154,587.00   | 77,293.50   | 555         |
| New Hampshire avenue                     | No. 195, approved Mar. 3, 1899. | June 2           | 1900.<br>July 8       | 100,791.96   | 50,395.00   | 557         |
| Columbia road east of Thirteenth street. | No. 181, approved June 6, 1900. | Aug. 1           | Mar. 20               | 29,612.64    | 14,830.00   | 574         |
| Sixteenth street and Columbia road.      | No. 182, approved June 6, 1900. | Sept. 27         | July 9                | 181,858.00   | 90,929.00   | 577         |
| Stanton street                           | No. 225, approved Mar. 3, 1899. | Oct. 5           | June 5                | 5,687.50     | 2,186.35    | 552         |
| Howard avenue                            | do                              | Nov. 8           | June 27               | 6,462.00     | 3,526.00    | 547         |
| Sixteenth street extended                | No. 195, approved Mar. 3, 1899. | 1901.<br>May 27  |                       | 729,952.29   | 108,834.75  | 580         |
| Pennsylvania avenue.                     | No. 225, approved Mar. 3, 1899. | July 24          | (2)                   | 1,939.00     | 1,019.00    | 551         |
| Fifth street                             | do                              |                  |                       |              |             | 554         |
| Total                                    |                                 |                  |                       | 1,699,627.39 |             |             |

<sup>1</sup> Hearing Sept. 6.

<sup>2</sup> Hearing Sept. 16.

## REPORT OF THE SUPERINTENDENT OF PROPERTY.

WASHINGTON, August 23, 1901.

CAPTAIN: I have the honor to forward herewith detailed statements, as of July 1, 1901, showing the operation of the property division for the fiscal year ending June 30, as follows:

|                                                                                                                           |              |
|---------------------------------------------------------------------------------------------------------------------------|--------------|
| 1. Construction materials purchased .....                                                                                 | \$301,235.33 |
| 2. Miscellaneous purchases .....                                                                                          | 88,201.27    |
| 3. List of employees, other than those on the per annum rolls, and amounts paid to each from various appropriations ..... | 19,229.14    |
| Total .....                                                                                                               | \$408,665.73 |

Deliveries under contracts for furnishing curbing, sewer pipe, vitrified paving blocks, vitrified invert sewer bricks, paving and concrete and screened sand, screened gravel and natural cement are still in course of execution. The report as to these items is therefore incomplete.

Very respectfully,

R. D. SIMMS,  
Superintendent of Property.

Capt. LANSING H. BEACH,  
Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.

STATEMENT NO. 1.—Showing amount of construction materials purchased and issued from the District of Columbia property yards during the year ending June 30, 1901.

|                                                              | Quantities.          | Values.      |
|--------------------------------------------------------------|----------------------|--------------|
| <b>Terra-cotta sewer pipe, branches, bends and reducers:</b> |                      |              |
| 24-inch sewer pipe .....                                     | 3,717 feet.          | \$2,622.88   |
| 21-inch sewer pipe .....                                     | 8,283 do.            | 4,675.93     |
| 18-inch sewer pipe .....                                     | 9,569 do.            | 3,535.06     |
| 15-inch sewer pipe .....                                     | 10,703 do.           | 2,996.44     |
| 12-inch sewer pipe .....                                     | 18,569 do.           | 3,516.97     |
| 10-inch sewer pipe .....                                     | 9,793 do.            | 1,528.79     |
| 8-inch sewer pipe .....                                      | 2,537 do.            | 222.25       |
| 6-inch sewer pipe .....                                      | 9,189 do.            | 657.45       |
| 8-inch to 6-inch reducers .....                              | 28 number.           | 10.08        |
| Vitrified sewer invert blocks .....                          | 1,997 feet.          | 708.60       |
| Vitrified sewer invert bricks .....                          | 468,566 number.      | 7,848.47     |
| Portland cement .....                                        | 14,051 barrels.      | 31,455.94    |
| Natural cement .....                                         | 23,934 do.           | 17,225.32    |
| Castings .....                                               |                      | 3,461.20     |
| Water boxes .....                                            | 438 number.          | 281.42       |
| Sidewalk paving bricks .....                                 | 350,715 do.          | 3,910.47     |
| Asphalt paving blocks .....                                  | 362,219 do.          | 20,865.00    |
| Repressed vitrified paving blocks .....                      | 910,214 do.          | 19,596.37    |
| Repressed vitrified paving half blocks .....                 | 153,083 do.          | 2,142.04     |
| Paving and concrete sand .....                               | 3,785 cubic yards.   | 1,891.92     |
| Screened sand .....                                          | 402 do.              | 231.18       |
| Screened pebbles .....                                       | 3,295 do.            | 2,775.75     |
| Curbing .....                                                | 113,808 linear feet. | 80,671.59    |
| Broken stone .....                                           | 44,928 cubic yards.  | 44,020.25    |
| Freight .....                                                |                      | 24,192.00    |
| Hauling .....                                                |                      | 9,963.95     |
| Bluestone basin tops .....                                   | 20 number.           | 238.00       |
| Storage on Portland cement .....                             |                      | 1,078.68     |
| Red sewer bricks .....                                       | 890,254 number.      | 8,751.33     |
| Total .....                                                  |                      | \$301,235.33 |



# OPERATIONS OF THE ENGINEER DEPARTMENT, D. C. 163

STATEMENT No. 2.—Showing miscellaneous purchases made during the year ending June 30, 1901.

|                                          |           |                                       |           |
|------------------------------------------|-----------|---------------------------------------|-----------|
| Awnings purchased and repaired.....      | \$118.75  | Mortar, lime, and hair.....           | \$82.65   |
| Anemometer.....                          | 21.35     | Maps, charts, and repairs to.....     | 227.40    |
| Aquaphone.....                           | 2.58      | Oils, illuminating and engine.....    | 711.34    |
| Blank forms, printing, and binding...    | 2,450.01  | Plumbers' supplies.....               | 4,538.12  |
| Books made to order.....                 | 728.58    | Periodicals and publications.....     | 65.22     |
| Books, rubber.....                       | 178.70    | Photographic apparatus and material   | 119.64    |
| Bicycle repairs.....                     | 80.88     | Pitch.....                            | 604.12    |
| Bridge material, iron, steel, and struc- |           | Plows, and repairs to.....            | 139.08    |
| tural.....                               | 491.63    | Pumps.....                            | 322.25    |
| Badges, and repairs to.....              | 184.00    | Paints, glass, and oils.....          | 4,024.92  |
| Blue prints.....                         | 1,026.74  | Rent, D. C. property yard.....        | 300.00    |
| Broken stone, flagging, etc.....         | 249.81    | Rent, warehouses.....                 | 1,130.76  |
| Bricks, insulating.....                  | 80.00     | Repairs:                              |           |
| Castings.....                            | 6,067.98  | D. C. building.....                   | \$57.50   |
| Cement, asphalt.....                     | 225.30    | U street pump house.....              | 167.00    |
| Cement, plumbers' and slaters'.....      | 64.17     | Damage 517 Eleventh street.....       | 21.00     |
| Drugs and chemical apparatus.....        | 306.76    |                                       | 245.50    |
| Dry goods.....                           | 32.62     | Railroad ties.....                    | 184.95    |
| Drafting instruments and materials.....  | 462.97    | Surveyors' instruments and repairs to | 329.00    |
| Duplicator.....                          | 6.00      | Stationery.....                       | 1,667.03  |
| Dump cars.....                           | 240.00    | Saddlery.....                         | 603.63    |
| Electrical supplies.....                 | 1,971.63  | Steam roller, and repairs.....        | 62.12     |
| Engine, machinery, etc.....              | 686.37    | Seeds, trees, etc.....                | 200.05    |
| Forage.....                              | 7,090.04  | Scales.....                           | 130.35    |
| Fertilizer.....                          | 78.90     | Tinware.....                          | 1,800.68  |
| Furniture, and repairs to.....           | 1,137.94  | Typewriters and repairs.....          | 412.81    |
| Fuel.....                                | 9,523.77  | Tools, and repairs to.....            | 2,411.93  |
| Groceries.....                           | 47.46     | Tickets, street car.....              | 289.50    |
| Hardware.....                            | 5,043.88  | Valves and castings, water depart-    |           |
| Hose and couplings.....                  | 1,307.75  | ment.....                             | 5,795.18  |
| Horses.....                              | 175.00    | Wagons, carts, and buggies, and re-   |           |
| Ice.....                                 | 65.66     | pairs to.....                         | 2,612.16  |
| Lead, Omaha pig.....                     | 3,583.20  | Water meters.....                     | 171.00    |
| Lumber.....                              | 14,508.85 |                                       |           |
| Leather strips.....                      | 640.80    | Total.....                            | 88,201.27 |
| Ladders.....                             | 16.80     |                                       |           |

STATEMENT No. 3.—Showing list of employees other than those on the per-annum rolls, amount paid to each, and the various appropriations from which such payments were made.

|                        | Rate.                    | Assessment and permit work. |         | Improve-ment and repairs. | Cleaning and repair-ing sewers and basins. | Replacing obstructed sewers. | Main and pipe sewers. |
|------------------------|--------------------------|-----------------------------|---------|---------------------------|--------------------------------------------|------------------------------|-----------------------|
|                        |                          | Streets.                    | Sewers. |                           |                                            |                              |                       |
| R. D. Simms.....       | \$5.00                   | \$120.00                    | \$70.00 | \$255.00                  | \$44.97                                    | \$31.53                      | -----                 |
| C. T. Shoemaker.....   | 4.50                     | 108.00                      | 63.00   | 229.50                    | 40.47                                      | 28.38                        | -----                 |
| J. A. McDaniel.....    | 4.00                     | 132.00                      | 56.00   | 204.00                    | 35.98                                      | 25.21                        | -----                 |
| H. M. Spencer.....     | 4.00                     | 96.00                       | 56.00   | 148.00                    | 35.98                                      | 25.22                        | \$56.00               |
| W. H. Edgar.....       | 3.50                     | 84.00                       | 49.00   | 129.50                    | 31.48                                      | 22.08                        | 49.00                 |
| H. B. vander Las.....  | 2.50                     | 60.00                       | 35.00   | 122.50                    | 22.49                                      | 10.01                        | -----                 |
| Edward Morris.....     | 2.50                     | 30.00                       | 35.00   | 32.50                     | 22.49                                      | 11.24                        | -----                 |
| William Donaldson..... | 4.00                     | 96.00                       | 56.00   | 204.00                    | 35.98                                      | 25.22                        | -----                 |
| H. M. Dickinson.....   | 3.25                     | 78.00                       | 84.55   | 123.50                    | 20.23                                      | 20.50                        | 14.40                 |
| W. J. W. Grey.....     | 3.00                     | 69.00                       | 45.00   | 120.00                    | 26.98                                      | 12.02                        | -----                 |
| W. H. Voss.....        | 3.00                     | 111.00                      | 42.00   | 153.00                    | 26.98                                      | 18.92                        | -----                 |
| G. T. Hammer.....      | 2.00                     | 72.00                       | 28.00   | 25.25                     | 16.60                                      | 30.60                        | 62.86                 |
| Blacksmiths.....       | { 3.25<br>1.75<br>2.00 } | 55.00                       | 70.00   | 25.25                     | -----                                      | 11.41                        | 156.29                |
| Laborers.....          | { 1.75<br>1.50 }         | 725.50                      | 220.92  | 52.50                     | 345.08                                     | 85.01                        | 376.16                |
| Total.....             | -----                    | 1,836.50                    | 910.47  | 1,824.50                  | 714.71                                     | 357.35                       | 714.71                |

## STATEMENT NO. 3.—Showing list of employees, etc.—Continued.

|                   | Rate.                                    | Suburban sewers. | Arizona avenue sewer. | L. street sewer. | East side intercepting sewer.                          |                                                                        | Extension of Boundary sewer. | Sewage pumping station. |
|-------------------|------------------------------------------|------------------|-----------------------|------------------|--------------------------------------------------------|------------------------------------------------------------------------|------------------------------|-------------------------|
|                   |                                          |                  |                       |                  | Between Twenty-second and A NE. and Twelfth street SE. | From Twelfth street SE. to pumping station, foot of New Jersey avenue. |                              |                         |
| R. D. Simms       | \$5.00                                   | -----            | \$95.12               | -----            | \$28.58                                                | \$23.12                                                                | \$27.93                      | \$13.75                 |
| C. T. Shoemaker   | 4.50                                     | -----            | 85.61                 | -----            | 25.72                                                  | 20.81                                                                  | 25.14                        | 12.37                   |
| J. A. McDannel    | 4.00                                     | -----            | 76.09                 | -----            | 22.87                                                  | 18.50                                                                  | 22.34                        | 11.01                   |
| H. M. Spencer     | 4.00                                     | -----            | 76.10                 | -----            | 22.86                                                  | 18.49                                                                  | 22.35                        | 11.00                   |
| W. H. Edgar       | 3.50                                     | \$91.00          | 45.50                 | -----            | 11.76                                                  | -----                                                                  | 19.56                        | 9.62                    |
| H. B. vander Las  | 2.50                                     | 32.50            | 47.56                 | -----            | 5.88                                                   | 11.56                                                                  | -----                        | -----                   |
| Edward Morris     | 2.50                                     | -----            | -----                 | -----            | 1.80                                                   | -----                                                                  | 3.00                         | 1.47                    |
| William Donaldson | 4.00                                     | 52.00            | -----                 | -----            | 13.45                                                  | -----                                                                  | 22.35                        | 11.00                   |
| H. M. Dickinson   | 3.25                                     | 91.07            | -----                 | \$9.66           | 29.12                                                  | 38.93                                                                  | 18.16                        | 8.93                    |
| W. J. W. Grey     | 3.00                                     | 42.07            | -----                 | -----            | -----                                                  | 35.93                                                                  | -----                        | -----                   |
| W. H. Voss        | 3.00                                     | 45.07            | -----                 | -----            | 10.08                                                  | 35.93                                                                  | 16.77                        | 8.25                    |
| G. T. Hammer      | 2.00                                     | 29.75            | -----                 | 29.95            | 11.19                                                  | 22.25                                                                  | -----                        | -----                   |
| Blacksmiths       | { 3.25<br>1.75<br>2.00<br>1.75<br>1.50 } | 68.25            | 37.38                 | 99.61            | 46.07                                                  | -----                                                                  | 27.73                        | 13.66                   |
| Laborers          | { 1.75<br>2.00<br>1.75<br>1.50 }         | 264.71           | 251.35                | 289.60           | 199.45                                                 | 263.30                                                                 | 80.59                        | 256.28                  |
| Total             | -----                                    | 716.42           | 714.71                | 428.82           | 428.83                                                 | 428.82                                                                 | 285.92                       | 357.34                  |

|                   | Rate.                                    | Repairs to streets, avenues, and alleys. | Sidewalks and curbs. | Construction of county roads. | Adams Mill road. | Extension of Columbia road, east of Thirteenth street. | Repairs to county roads. | Bridges. |
|-------------------|------------------------------------------|------------------------------------------|----------------------|-------------------------------|------------------|--------------------------------------------------------|--------------------------|----------|
| R. D. Simms       | \$5.00                                   | \$245.00                                 | -----                | \$130.00                      | -----            | -----                                                  | -----                    | \$195.00 |
| C. T. Shoemaker   | 4.50                                     | 238.50                                   | -----                | 117.00                        | -----            | -----                                                  | -----                    | 175.50   |
| J. A. McDannel    | 4.00                                     | 160.00                                   | -----                | 104.00                        | -----            | -----                                                  | -----                    | 156.00   |
| H. M. Spencer     | 4.00                                     | 160.00                                   | -----                | 104.00                        | -----            | \$52.00                                                | \$52.00                  | 104.00   |
| W. H. Edgar       | 3.50                                     | 140.00                                   | -----                | 91.00                         | -----            | -----                                                  | 45.50                    | 91.00    |
| H. B. vander Las  | 2.50                                     | 100.00                                   | -----                | 90.00                         | -----            | -----                                                  | 32.50                    | 65.00    |
| Edward Morris     | 2.50                                     | 46.25                                    | -----                | 65.00                         | -----            | -----                                                  | 2.50                     | 22.50    |
| William Donaldson | 4.00                                     | 264.00                                   | -----                | 104.00                        | -----            | -----                                                  | -----                    | 114.00   |
| H. M. Dickinson   | 3.25                                     | 84.50                                    | -----                | 42.25                         | -----            | -----                                                  | -----                    | 84.50    |
| W. J. W. Grey     | 3.00                                     | 72.00                                    | -----                | 135.00                        | -----            | 39.00                                                  | -----                    | 78.00    |
| W. H. Voss        | 3.00                                     | 78.00                                    | -----                | 78.00                         | -----            | -----                                                  | 39.00                    | 78.00    |
| G. T. Hammer      | 2.00                                     | 25.25                                    | -----                | 96.00                         | -----            | -----                                                  | 25.25                    | 20.00    |
| Blacksmiths       | { 3.25<br>1.75<br>2.00<br>1.75<br>1.50 } | 65.75                                    | \$63.00              | -----                         | -----            | -----                                                  | 83.51                    | 10.00    |
| Laborers          | { 1.75<br>2.00<br>1.75<br>1.50 }         | 300.36                                   | 37.00                | 229.75                        | \$30.00          | 9.00                                                   | 319.67                   | 66.50    |
| Total             | -----                                    | 1,999.61                                 | 100.00               | 1,386.00                      | 39.00            | 100.00                                                 | 599.93                   | 1,290.00 |

STATEMENT No. 3.—*Showing list of employees, etc.—Continued.*

|                          | Rate.  | Repairs and improvements to school buildings and grounds. | School buildings. | Special repairs to market houses. | Repairs to police stations. | Repairs to engine houses. | Repairs to police court. | Work-house for males. |
|--------------------------|--------|-----------------------------------------------------------|-------------------|-----------------------------------|-----------------------------|---------------------------|--------------------------|-----------------------|
| R. D. Sinms .....        | \$5.00 | \$65.00                                                   |                   |                                   |                             |                           |                          |                       |
| C. T. Shoemaker .....    | 4.50   | 58.50                                                     |                   |                                   |                             |                           |                          |                       |
| J. A. McDannel .....     | 4.00   | 52.00                                                     |                   |                                   |                             |                           |                          |                       |
| H. M. Spencer .....      | 4.00   | 52.00                                                     |                   |                                   |                             |                           |                          |                       |
| W. H. Edgar .....        | 3.50   |                                                           | \$45.50           |                                   |                             |                           |                          |                       |
| H. B. van der Laas ..... | 2.50   |                                                           | 32.50             |                                   |                             |                           |                          |                       |
| Edward Morris .....      | 2.50   |                                                           | 32.50             |                                   |                             |                           |                          |                       |
| William Donaldson .....  | 4.00   | 12.00                                                     |                   |                                   |                             |                           |                          |                       |
| H. M. Dickinson .....    | 3.25   |                                                           | 42.25             |                                   |                             |                           |                          |                       |
| W. J. W. Grey .....      | 3.00   |                                                           | 59.00             |                                   |                             |                           |                          | 30.00                 |
| W. H. Voss .....         | 3.00   |                                                           |                   |                                   |                             |                           |                          | 30.00                 |
| G. T. Hammer .....       | 2.00   | 26.00                                                     | 26.00             |                                   |                             |                           |                          |                       |
| Blacksmiths .....        | 3.25   |                                                           |                   |                                   |                             |                           |                          |                       |
|                          | 1.75   |                                                           | 68.25             |                                   | \$24.00                     |                           |                          |                       |
|                          | 2.00   |                                                           |                   |                                   |                             |                           |                          |                       |
| Laborers .....           | 1.75   | 7.88                                                      | 160.00            | \$10.50                           |                             | \$22.00                   | \$3.50                   | 1.00                  |
|                          | 1.50   |                                                           |                   |                                   |                             |                           |                          |                       |
| Total .....              |        | 273.38                                                    | 466.00            | 10.50                             | 24.00                       | 22.00                     | 3.50                     | 60.00                 |

|                          | Rate.  | Extension of high-service system. | Pumping expense and pipe distribution. | Contingent expense, engineer stable. | Contingent expense, parking commission. | Street lighting. | Main taining public order, Feb. and Mar., 1901. | Totals.    |
|--------------------------|--------|-----------------------------------|----------------------------------------|--------------------------------------|-----------------------------------------|------------------|-------------------------------------------------|------------|
| R. D. Sinms .....        | \$5.00 | \$135.00                          | \$60.00                                |                                      |                                         |                  |                                                 | \$1,560.00 |
| C. T. Shoemaker .....    | 4.50   | 121.50                            | 54.00                                  |                                      |                                         |                  |                                                 | 1,404.00   |
| J. A. McDannel .....     | 4.00   | 108.00                            | 48.00                                  |                                      |                                         |                  |                                                 | 1,232.00   |
| H. M. Spencer .....      | 4.00   | 108.00                            | 48.00                                  |                                      |                                         |                  |                                                 | 1,248.00   |
| W. H. Edgar .....        | 3.50   | 94.50                             | 42.00                                  |                                      |                                         |                  |                                                 | 1,062.00   |
| H. B. van der Laas ..... | 2.50   | 67.50                             | 30.00                                  |                                      |                                         |                  |                                                 | 765.00     |
| Edward Morris .....      | 2.50   | 35.00                             | 30.00                                  |                                      |                                         |                  |                                                 | 371.25     |
| William Donaldson .....  | 4.00   | 160.00                            | 48.00                                  |                                      |                                         |                  |                                                 | 1,248.00   |
| H. M. Dickinson .....    | 3.25   | 87.75                             | 81.25                                  |                                      |                                         |                  |                                                 | 1,010.80   |
| W. J. W. Grey .....      | 3.00   | 41.00                             | 75.00                                  |                                      | \$42.25                                 |                  |                                                 | 870.00     |
| W. H. Voss .....         | 3.00   | 81.00                             | 36.00                                  |                                      |                                         |                  |                                                 | 897.00     |
| G. T. Hammer .....       | 2.00   | 28.00                             | 24.00                                  |                                      |                                         |                  |                                                 | 598.95     |
| Blacksmiths .....        | 3.25   |                                   |                                        |                                      |                                         |                  |                                                 |            |
|                          | 1.75   | 186.00                            | 14.70                                  | \$337.42                             |                                         | \$68.25          | \$35.11                                         | 1,566.64   |
|                          | 2.00   |                                   |                                        |                                      |                                         |                  |                                                 |            |
| Laborers .....           | 1.75   | 506.26                            | 69.50                                  |                                      | 5.50                                    | 106.75           | 39.79                                           | 5,365.50   |
|                          | 1.50   |                                   |                                        |                                      |                                         |                  |                                                 |            |
| Total .....              |        | 1,849.51                          | 660.45                                 | 337.42                               | 47.75                                   | 175.00           | 74.90                                           | 19,229.14  |

## REPORT OF THE PERMIT CLERK.

WASHINGTON, July 30, 1901.

CAPTAIN: Permits issued during the fiscal year ended June 30, 1901, were:

|                                                           |       |       |
|-----------------------------------------------------------|-------|-------|
| Water connections                                         | 1,362 |       |
| Water repairs                                             | 905   |       |
| Water specials                                            | 291   | 2,558 |
| Sewer connections                                         | 1,446 |       |
| Sewer repairs                                             | 1,044 |       |
| Sewer specials                                            | 878   | 3,368 |
| Gas and electric light connections                        | 946   |       |
| Gas and electric light repairs                            | 180   |       |
| Gas and electric light specials                           | 19    | 1,145 |
| Gas mains, lay                                            | 76    |       |
| Electric conduits, construct and extend                   | 56    |       |
| Electric conduits, connect with telephone                 | 8     |       |
| Electric conduits, replace cables in                      | 3     |       |
| Electric railroad conduits, connect with sewers           | 41    |       |
| Electric conduits, lay private in alley                   | 2     |       |
| Catch basins, build on electric railroad                  | 2     |       |
| Carriage step, place at curb                              | 1     |       |
| Conduits, lower and repair (United States)                | 3     |       |
| Copings, erect and repair on parkings                     | 88    |       |
| Derricks, operate and guy in roadway                      | 3     |       |
| Drain pipes, lay and clear                                | 3     |       |
| Fences, erect to inclose parkings                         | 338   |       |
| Fences, repair to inclose parkings                        | 479   |       |
| Excavations, make in public space                         | 6     |       |
| Engines and steam shovels, move over streets              | 19    |       |
| Flagging stone, lay in public space                       | 4     |       |
| Fire hydrants, use                                        | 6     |       |
| Drive-ways across sidewalk, construct and repair          | 37    |       |
| Gas service pipe, extend from building line               | 2     |       |
| Guard stones, place in alley                              | 1     |       |
| Hand rail, place on terrace steps                         | 1     |       |
| Hitching posts, place at curb                             | 3     |       |
| Hitching rings, place in curb                             | 9     |       |
| Leads, lay across parkings                                | 295   |       |
| Leads, repair across parkings                             | 284   |       |
| Lights, hang electric and gas                             | 51    |       |
| Manhole, build on electric railway                        | 1     |       |
| Material, take from and fill in public space              | 56    |       |
| Oil pipes, lower                                          | 2     |       |
| Parkings, grade                                           | 147   |       |
| Parkings, lay, remove, repair or replace pavement         | 26    |       |
| Parking, place platform on                                | 1     |       |
| Pipes, lay under sidewalks                                | 3     |       |
| Poles, erect, replace, and remove telegraph and telephone | 371   |       |
| Roadways, pave, grade, and repair, etc                    | 7     |       |
| Sewage-disposal plant, construct                          | 1     |       |
| Sewer, enter                                              | 1     |       |
| Sidewalks, haul across                                    | 62    |       |
| Sidewalks, repair                                         | 44    |       |
| Sidewalks, occupy for business purposes                   | 17    |       |
| Steps on parkings, erect, replace, or repair              | 169   |       |
| Stop-cock boxes, gas, adjust to grade                     | 17    |       |
| Sockets, sink in sidewalk                                 | 1     |       |
| Track, lay temporary for loading cars                     | 2     |       |
| Vaults, repair and replace cover                          | 4     |       |
| Walls, build retaining, on parkings                       | 19    |       |
| Water tables, lay and repair                              | 49    |       |
| Wires, string                                             | 102   |       |
| Wires, overhead connections (U. S. E. and P. E. P. Co.'s) | 39    |       |
| Wires, overhead telephone connections                     | 183   |       |

|                                                           |     |
|-----------------------------------------------------------|-----|
| Wires, monthly to connect overhead and make repairs ..... | 158 |
| Wires, miscellaneous .....                                | 6   |
| Trees, plant, remove, trim, and whitewash .....           | 25  |
| Miscellaneous, not enumerated by name .....               | 48  |

RAILROAD COMPANIES.

|                                                    |    |
|----------------------------------------------------|----|
| Anacostia and Potomac River Railroad Company ..... | 6  |
| Brightwood .....                                   | 2  |
| Capital Railway .....                              | 2  |
| Capital Traction .....                             | 11 |
| City and Suburban .....                            | 7  |
| Columbia .....                                     | 1  |
| Georgetown and Tenley .....                        | 1  |
| Metropolitan .....                                 | 4  |
| Baltimore and Ohio .....                           | 15 |
| Philadelphia, Wilmington and Baltimore .....       | 9  |
| Chesapeake and Ohio .....                          | 1  |
| Southern .....                                     | 1  |
| Washington, Alexandria and Mount Vernon .....      | 1  |

UNITED STATES GOVERNMENT.

|                                                    |         |
|----------------------------------------------------|---------|
| Architect, United States Capitol .....             | 1       |
| Coast and Geodetic Survey .....                    | 1       |
| Department of the Interior .....                   | 1       |
| Superintendent State, War, and Navy Building ..... | 1       |
| Post-Office Department .....                       | 2       |
| United States Navy-Yard .....                      | 1       |
| Washington Aqueduct (officer in charge) .....      | 1       |
| Grand total .....                                  | 10, 522 |

There has been a decrease of 67 in the number of permits issued as compared with the fiscal year ended June 30, 1900; also in the amount of money paid in fees to the collector of taxes, District of Columbia, as will be shown by his report.

|                                                       |         |
|-------------------------------------------------------|---------|
| Permits issued during the fiscal year 1899-1900 ..... | 10, 589 |
| Permits issued during the fiscal year 1900-1901 ..... | 10, 522 |

The following table shows the number of permits issued during the last five years, and the amount of money paid for permit fees to the collector of taxes, District of Columbia, during that time:

| Fiscal year.    | Permits issued. | Fees paid. |
|-----------------|-----------------|------------|
| 1896-97 .....   | 10, 153         | \$7, 355   |
| 1897-98 .....   | 10, 465         | 7, 845     |
| 1898-99 .....   | 11, 330         | 7, 692     |
| 1899-1900 ..... | 10, 589         | 6, 797     |
| 1900-1901 ..... | 10, 522         | 6, 583     |

Nine hundred and ninety-nine communications have been referred to this office, briefs made on cards, the permits necessary written, the papers indorsed with action taken and returned to the record office of the engineer department, or through that office to the division having charge of the inspection of the work for which the permits were issued.

One hundred and twenty-five names were recorded for laborers' places on District work during the year.

Very respectfully,

H. M. WOODWARD,  
Permit Clerk, District of Columbia.

Capt. LANSING H. BEACH,  
Corps of Engineers, U. S. A.,  
Engineer Commissioner District of Columbia.

## REPORT OF THE CHIEF CLERK.

WASHINGTON, July 1, 1901.

CAPTAIN: I have the honor to submit the following report for the fiscal year ended June 30, 1901:

|                                                      |        |
|------------------------------------------------------|--------|
| Communications received, briefed, and recorded ..... | 11,915 |
| Indorsements, references, and reports thereon .....  | 56,575 |
| Letters and orders prepared .....                    | 5,040  |
| Copies of contracts drawn .....                      | 616    |
| Vouchers and bills prepared and forwarded .....      | 5,904  |

Schedules of bids received during the fiscal year for work and materials under the engineer office, and statement of contracts for street improvements, sewers, construction materials, and miscellaneous work are herewith

Very respectfully.

A. Y. LAKEMAN,

Chief Clerk, Engineer Department, District of Columbia.

Capt. LANSING H. BEACH,

Corps of Engineers, U. S. A.,

Engineer Commissioner District of Columbia.

*Statement of contracts for the construction of sewers for the fiscal year 1901.*

| No.  | Date.          | Name and address of contractor.         | Location.                                                                                                                                                                                                                                | To construct—                           |
|------|----------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 2829 | Aug. 4, 1900   | Andrew Gleeson ....                     | Piney Branch Valley, between Fifth and Chesapeake and Piney Branch road and Vermilion street.                                                                                                                                            | Pipe sewers.                            |
| 2837 | Aug. 11, 1900  | Warren F. Brenizer.                     | Arizona avenue, between Canal road and New Cut road, and also north from New Cut road.                                                                                                                                                   | Circular sewers.                        |
| 2841 | Aug. 13, 1900  | Adam McCandlish.                        | Sixteenth street NW., between K and L; K street NW., between Fifteenth and Sixteenth; Nineteenth street NW., between Q and R; Potomac Park, between river and Twenty-sixth street; Twenty-sixth street NW., between Water and D streets. | Pipe sewers.                            |
| 2870 | Sept. 26, 1900 | P. D. Vinson .....                      | Eighteenth street NW., between Q and Corcoran; New Hampshire avenue, between Corcoran and Riggs; S street NW., between Fourteenth and Fifteenth; Fourteenth street NW., between R and S; L street NW., between Sixteenth and Twentieth.  | Pipe and brick sewers.                  |
| 2889 | Dec. 18, 1900  | John Jacoby, Wilmington, Del.           | From Seventeenth and E. NE., to near Twenty-first and A. NE.                                                                                                                                                                             | Brick sewers.                           |
| 2893 | Jan. 31, 1901  | Andrew Gleeson, Washington, D. C.       | Tiber Creek and New Jersey avenue high-level intercepting sewer.                                                                                                                                                                         | Gates, connections, and outlet section. |
|      |                |                                         | Nourse road, from Klinge Ford bridge to Connecticut avenue.                                                                                                                                                                              | 15-inch pipe sewer.                     |
| 2908 | Apr. 27, 1901  | J. P. Lurgney, Washington, D. C.        | Twenty-fourth street NW., between Massachusetts avenue and Bancroft street.                                                                                                                                                              | 2.50 by 3.75 egg-shaped sewer.          |
| 2909 | .....do.....   | M. F. McNamara & Co., Washington, D. C. | Connecticut avenue, from Nourse road to Pierce Mill road.                                                                                                                                                                                | Sewers.                                 |
| 2910 | Apr. 29, 1901  | J. Jacoby, Wilmington, Del.             | Howard avenue, Barry farm, from Anacostia River to Nicholas avenue and along Nicholas avenue northward.                                                                                                                                  | Sewer                                   |
| 2939 | June 28, 1901  | R. A. Malone & Co., Lancaster, Pa.      | Hartford street, between Seventh and Ninth, NE.; and in Seventh, between Galena and Hartford streets; also in Arizona avenue, north of New Cut road.                                                                                     | Sewers.                                 |

*Statement of contracts for the construction of sewers, etc.—Continued.*

| No. | Date.         | Name and address of contractor.     | Location.                                                                                                           | To construct— |
|-----|---------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------|
| 200 | June 29, 1901 | Lyons Bros., Washington, D. C.      | Fourteenth street N W., between N and Rhode Island avenue; also in Thirteenth street SW., between B and D.          | Sewer.        |
| 201 | do            | W. F. Brenizer, Washington, D. C.   | M street N W., between Seventh and Ninth; alley, square 424; and Twelfth street SW., between D and Virginia avenue. | Sewers.       |
| 202 | June 28, 1901 | Peyton D. Vinson, Washington, D. C. | North Capitol street, between G and K streets.                                                                      | Sewer.        |

*Statement of contracts for improvement of streets, avenues, and roads for fiscal year 1901.*

| No.  | Date.         | Name and address of contractor.       | Location.                                                                                                                                     | Character of work.                                                 |
|------|---------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 274  | July 2, 1900  | Washington Asphalt Block and Tile Co. | Where ordered                                                                                                                                 | Lay asphalt block pavement.                                        |
| 273  | July 23, 1900 | Matthew Myers                         | Frankfort street, between Queens Chapel road and Twenty-second street, Langdon.                                                               | Grade.                                                             |
| 286  | July 18, 1900 | Washington Asphalt Block and Tile Co. | Where ordered                                                                                                                                 | Grade, set curb, pave cobble gutters, and vitrified block gutters. |
| 288  | July 6, 1900  | Barber Asphalt Paving Co.             | do                                                                                                                                            | Lay sheet asphalt pavement.                                        |
| 2810 | July 19, 1900 | Andrew Gleeson                        | Woodbridge street                                                                                                                             | Grade.                                                             |
| 2828 | Aug. 4, 1900  | Lyons Bros.                           | Crescent street, from Sixteenth west.                                                                                                         | Do.                                                                |
| 2830 | Aug. 9, 1900  | M. F. Talty                           | Where ordered                                                                                                                                 | Grade, set curb, pave, and repair cobble gutters, etc.             |
| 2842 | Aug. 8, 1900  | W. F. Brenizer                        | Cathedral avenue                                                                                                                              | Grade.                                                             |
| 2854 | Aug. 17, 1900 | Geo. B. Mullin                        | Blagden avenue                                                                                                                                | Do.                                                                |
| 2856 | Aug. 23, 1900 | R. A. Malone                          | Eleventh street extended, between Florida and Lydecker avenues.                                                                               | Do.                                                                |
| 2858 | Aug. 25, 1900 | Tait-Burrows Contracting Co.          | Thirty-seventh street, between Y and Back streets.                                                                                            | Do.                                                                |
| 2872 | Oct. 6, 1900  | Fredk. Drew                           | Thirteen street, between Harvard and Whitney; Kenyon street, between Thirteenth and Sherman; Marshall street, between Thirteenth and Sherman. | Lay cement sidewalks,                                              |
| 2882 | Oct. 26, 1900 | Colburn Paving Co., Washington, D. C. | Where directed                                                                                                                                | Lay cement sidewalks.                                              |
| 2890 | Apr. 5, 1901  | Andrew Gleeson                        | Adams Mill road, Cincinnati street to Zoological Park.                                                                                        | Grade.                                                             |
| 2902 | Apr. 11, 1901 | J. C. Regan & Co.                     | Connecticut avenue, west of Rock Creek.                                                                                                       | Do.                                                                |
| 2906 | Apr. 22, 1901 | do                                    | Columbia road, Thirteenth street to Sherman avenue.                                                                                           | Do.                                                                |
| 2911 | Apr. 30, 1901 | Barber Asphalt Paving Co.             | Bladensburg road, from H street northward.                                                                                                    | Lay standard asphalt.                                              |
| 2915 | May 14, 1901  | Andrew Gleeson                        | Nebraska avenue, between Newark street, Wesley Heights, and Vallejo street, Dumbane.                                                          | Grade.                                                             |
| 2916 | May 15, 1901  | W. H. H. Allen                        | Illinois avenue, between Xenia street and Albemarle street, Petworth.                                                                         | Do.                                                                |
| 2918 | May 21, 1901  | Killeen & Ball                        | Blagden avenue to Rock Creek Park line.                                                                                                       | Do.                                                                |
| 2921 | May 22, 1901  | John Jacoby                           | Joliet street, between Wisconsin avenue and Tunlaw road.                                                                                      | Do.                                                                |
| 2926 | June 11, 1901 | Washington Asphalt Block and Tile Co. | Where ordered                                                                                                                                 | Lay asphalt block pavement.                                        |

*Statement of contracts for general supplies for the fiscal year 1901.*

| No.  | Date.          | Name and address of contractor.              | To furnish—                 |
|------|----------------|----------------------------------------------|-----------------------------|
| 2798 | July 9, 1900   | Conrad Becker, Washington, D. C.             | Saddlery.                   |
| 2799 | July 16, 1900  | Chas. G. Stott & Co., Washington, D. C.      | Stationery.                 |
| 2791 | July 19, 1900  | Lonis Hoppenmaier, Washington, D. C.         | Pig lead.                   |
| 2796 | July 18, 1900  | Geo. F. Muth & Co., Washington, D. C.        | Hardware.                   |
| 2797 | July 12, 1900  | Blum Bros., Washington, D. C.                | House furnishings.          |
| 2798 | do             | do                                           | Furniture, shading, etc.    |
| 2799 | July 24, 1900  | Rudolph West & Co., Washington, D. C.        | Tinware.                    |
| 2800 | July 20, 1900  | J. & M. Strasburger, Washington, D. C.       | Boots and shoes.            |
| 2801 | July 18, 1900  | Geo. F. Muth & Co., Washington, D. C.        | Glass, paints, and varnish. |
| 2803 | July 16, 1900  | Church & Stephenson, Washington, D. C.       | Lumber.                     |
| 2811 | July 23, 1900  | Chas. White & Co., Washington, D. C.         | Miscellaneous castings.     |
| 2812 | July 26, 1900  | American Ice Co., New York                   | Ice.                        |
| 2813 | July 24, 1900  | Rudolph West & Co., Washington, D. C.        | Hardware.                   |
| 2815 | July 27, 1900  | Thos. Somerville & Sons, Washington, D. C.   | Plumbers' material.         |
| 2821 | July 30, 1900  | J. S. Buchanan & Co., Philadelphia, Pa.      | Electrical supplies.        |
| 2822 | July 28, 1900  | S. S. Daish & Sons, Washington, D. C.        | Forage.                     |
| 2823 | July 21, 1900  | T. T. Keane, Washington, D. C.               | Fresh meat and corned beef. |
| 2826 | July 31, 1900  | W. J. C. Dulany, Baltimore, Md.              | School books.               |
| 2827 | July 25, 1900  | Mackall Bros., Washington, D. C.             | Drugs.                      |
| 2831 | July 30, 1900  | Standard Oil Co., Washington, D. C.          | Oils, etc.                  |
| 2832 | Aug. 7, 1900   | Dunlap Printing Co., Philadelphia, Pa.       | Miscellaneous printing.     |
| 2834 | July 11, 1900  | Frank Hume, Washington, D. C.                | Groceries.                  |
| 2835 | do             | do                                           | Liquors.                    |
| 2840 | Aug. 7, 1900   | Dunlap Printing Co., Philadelphia, Pa.       | Miscellaneous printing.     |
| 2843 | Aug. 8, 1900   | Chas. Werner, Washington, D. C.              | Fuel.                       |
| 2845 | Aug. 7, 1900   | Dunlap Printing Co., Philadelphia, Pa.       | Blank forms.                |
| 2846 | July 11, 1900  | W. M. Galt & Co., Washington, D. C.          | Flour.                      |
| 2849 | July 12, 1900  | Blum Bros., Washington, D. C.                | Dry goods.                  |
| 2850 | July 24, 1900  | J. C. Ergood & Co., Washington, D. C.        | Groceries, bacon.           |
| 2851 | July 26, 1900  | A. P. Smith Manufacturing Co., Newark, N. J. | Curb cocks, etc.            |
| 2861 | Aug. 31, 1900  | W. J. Dulany, Baltimore, Md.                 | Stationery.                 |
| 2862 | Sept. 1, 1900  | Chas. G. Stott & Co., Washington, D. C.      | Do.                         |
| 2863 | Sept. 4, 1900  | R. C. Ballantyne, Washington, D. C.          | Do.                         |
| 2864 | Sept. 10, 1900 | F. Morrison Paper Co., Washington, D. C.     | Do.                         |
| 2868 | Sept. 8, 1900  | W. B. Moses & Sons, Washington, D. C.        | Furniture.                  |
| 2869 | do             | do                                           | Do.                         |
| 2876 | Sept. 13, 1900 | S. S. Daish & Sons, Washington, D. C.        | Fuel.                       |
| 2880 | Oct. 23, 1900  | do                                           | Do.                         |
| 2894 | Feb. 19, 1901  | A. P. Smith Manufacturing Co., Newark, N. J. | Curb and corporation cocks. |
| 2937 | Feb. 28, 1901  | Lewis Hoppenmaier, Washington, D. C.         | Plumbers' supplies.         |

*Statement of contracts for furnishing construction material for fiscal year 1901.*

| No.  | Date.         | Name and address of contractor.                            | To furnish.               |
|------|---------------|------------------------------------------------------------|---------------------------|
| 2785 | July 2, 1900  | Washington Asphalt Block and Tile Co., Washington, D. C.   | Asphalt Paving blocks.    |
| 2786 | July 6, 1900  | John B. Lord, Washington, D. C.                            | Screened gravel.          |
| 2788 | July 2, 1900  | Francis Jones & Co., Lithonia, Ga.                         | Granite curb.             |
| 2802 | July 17, 1900 | Angus Lamond, Washington, D. C.                            | Terra-cotta material.     |
| 2804 | July 5, 1900  | Lewis E. Smoot, Alexandria, Va.                            | Paving and concrete sand. |
| 2805 | July 2, 1900  | Eastern Paving Brick Co., Catskill, N. Y.                  | Vitrified paving blocks.  |
| 2807 | July 20, 1900 | National Mortar Co., Washington, D. C.                     | Cement.                   |
| 2809 | June 29, 1900 | Lehigh Portland Cement Co., Allentown, Pa.                 | Do                        |
| 2818 | July 21, 1900 | American Clay Manufacturing Co., Pittsburg, Pa.            | Paving blocks.            |
| 2819 | do            | do                                                         | Sewer invert bricks.      |
| 2820 | July 25, 1900 | Camden Iron Works, Philadelphia, Pa.                       | Cast-iron water pipe.     |
| 2825 | do            | Mack Manufacturing Co., Pittsburg, Pa.                     | Sewer invert block.       |
| 2836 | July 11, 1900 | J. H. McGill, Washington, D. C.                            | Natural cement.           |
| 2877 | July 13, 1900 | U. S. Cast Iron Pipe and Foundry Co., Philadelphia, Pa.    | Cast-iron water pipe.     |
| 2886 | Nov. 20, 1900 | Venable Bros., Atlanta, Ga.                                | Granite curb.             |
| 2891 | Jan. 19, 1900 | Guise Brick and Stone Co., Williamsport, Pa.               | Sewer invert brick.       |
| 2927 | June 11, 1900 | Washington Asphalt Block and Tile Co., Washington, D. C.   | Asphalt blocks.           |
| 2932 | June 21, 1900 | Columbia National Sand and Dredging Co., Washington, D. C. | Paving and concrete sand. |
| 2934 | June 24, 1900 | Lehigh Portland Cement Co., Allentown, Pa.                 | Portland cement.          |
| 2935 | June 17, 1900 | Standard Brick Co., Washington, D. C.                      | Sewer bricks.             |



*Statement of construction, hauling, and miscellaneous contracts for fiscal year 1901.*

| No.  | Date.          | Name and address of contractor.                             | Description.                                                                                                                 |
|------|----------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 2782 | July 21, 1900  | Welsbach Street Lighting Co., of America, Philadelphia, Pa. | Furnish, operate, repair, and maintain Welsbach street lights.                                                               |
| 2783 | July 12, 1900  | Washington Gaslight Co., Washington, D. C.                  | Furnish gas, operate, and maintain Collins lamps.                                                                            |
| 2792 | July 18, 1900  | Cranford Paving Co., Washington, D. C.                      | Improve grounds of Hubbard School on Kenyon street between Sherman avenue and Thirteenth.                                    |
| 2794 | July 26, 1900  | H. I. Gregory, Washington, D. C.                            | Construct hot air hot blast heating apparatus for school building, South Carolina avenue and Second street SE.               |
| 2795 | .....do.....   | .....do.....                                                | Construct hot air hot blast heating apparatus for school building, Fifteenth street NE. between Gales and Rose-dale streets. |
| 2814 | July 18, 1900  | James M. Dunn, Washington, D. C.                            | Construct an 8-room school building, South Carolina avenue and Second street SE.                                             |
| 2816 | June 26, 1900  | Georgetown Gaslight Co., Washington, D. C.                  | Furnish, operate, and maintain street lighting west of Rock Creek.                                                           |
| 2817 | July 28, 1900  | E. P. Allis Company, Milwaukee, Wis.                        | Design and furnish general and detail plans, furnish and erect complete 2 pumping engines.                                   |
| 2824 | Aug. 1, 1900   | S. S. Shedd & Bro., Washington, D. C.                       | Repair and change plumbing in Force School building, Massachusetts avenue between Seventeenth and Eighteenth NW.             |
| 2831 | Aug. 6, 1900   | John Hughes, jr., Washington, D. C.                         | Construct chemical engine house at Fortieth and Xenia streets.                                                               |
| 2833 | July 11, 1900  | Standard Lime and Stone Co., Baltimore, Md.                 | Quarry, crush, and deliver stone at quarry at Dickersons, Md.                                                                |
| 2838 | Aug. 29, 1900  | Arthur Cowsill, Washington, D. C.                           | Construct complete manual training school on square 553.                                                                     |
| 2844 | Aug. 13, 1900  | Jas. Nolan & Sons, Washington, D. C.                        | Repair and change plumbing in Gales school intersection Massachusetts avenue, First, and G.                                  |
| 2847 | Aug. 14, 1900  | H. I. Gregory, Washington, D. C.                            | Construct complete hot air, hot blast heating apparatus, Takoma Park School.                                                 |
| 2848 | Aug. 7, 1900   | W. H. Larman, Washington, D. C.                             | Furnish, deliver, and set up complete steam boilers in Franklin School.                                                      |
| 2852 | Aug. 24, 1900  | D. F. Mockabee, Washington, D. C.                           | Erect and complete porch on north wing of almshouse at Washington Asylum.                                                    |
| 2853 | Aug. 13, 1900  | H. E. Burgess, Washington, D. C.                            | Construct complete school building on Piney Branch road near Blair road, Takoma Park.                                        |
| 2855 | .....do.....   | Jas. Nolan & Sons, Washington, D. C.                        | Repair and change plumbing in Garnet School building, U street NW., between Tenth and Vermont avenue.                        |
| 2857 | Aug. 24, 1900  | Pavarini & Greer, Washington, D. C.                         | Construct complete truck house on Whitney avenue, between Thirteenth and Fourteenth NW.                                      |
| 2859 | Aug. 28, 1900  | Jas. M. Dunn, Washington, D. C.                             | Construct an 8-room school building, Fifteenth street NE., between Rose-dale and Gales.                                      |
| 2860 | Aug. 29, 1900  | .....do.....                                                | Construct complete an assembly hall at Reform School for Boys.                                                               |
| 2865 | Sept. 27, 1900 | Chas. T. Holloway & Co., Baltimore, Md.                     | Furnish and deliver 2 chemical engines and hose wagons.                                                                      |
| 2866 | .....do.....   | .....do.....                                                | Furnish and deliver 1 chemical engine.                                                                                       |
| 2867 | Sept. 18, 1900 | The Fire Extinguisher Manufacturing Co., New York City.     | Furnish and deliver 1 water tower.                                                                                           |
| 2871 | Sept. 27, 1900 | Gheessen & Humphrey, Washington, D. C.                      | Construct complete 8-room school building on block 9, Barry Farm, Nichols avenue.                                            |
| 2873 | Oct. 8, 1900   | Pavarini & Greer, Washington, D. C.                         | Construct corridor and inclose yard walls at Girls' Reform School.                                                           |
| 2875 | Oct. 9, 1900   | William E. Speir, Washington, D. C.                         | Construct manual training school at Seventh and Rhode Island avenue, NW.                                                     |
| 2878 | Oct. 30, 1900  | Geisel Construction Co., St. Louis, Mo.                     | Construct Melan arch bridge on line of Quarry road across Rock Creek.                                                        |
| 2879 | Oct. 19, 1900  | H. I. Gregory, Washington, D. C.                            | Construct hot air hot blast heating apparatus in school building, block 9, Barry Farm Subdivision, Nichols avenue.           |
| 2881 | Oct. 30, 1900  | Geisel Construction Co., St. Louis, Mo.                     | Construct Melan arch bridge on line of Rock Creek drive, across Piney branch.                                                |
| 2883 | Nov. 1, 1900   | H. F. Boswell & Co., Washington, D. C.                      | Furnish and place boiler in harbor boat Vigilant.                                                                            |
| 2884 | Nov. 8, 1900   | Fredk. Drew, Washington, D. C.                              | Improve grounds of Johnson School building, Mount Pleasant.                                                                  |

*Statement of construction, hauling, and miscellaneous contracts, etc.—Continued.*

| No.  | Date.         | Name and address of contractor.                            | Description.                                                                                                                         |
|------|---------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 2885 | Nov. 10, 1900 | Lyons Bros., Washington, D. C. ....                        | Construct rubble masonry wall along east bank of Rock Creek, north of Woodley Lane bridge.                                           |
| 2887 | Oct. 11, 1900 | Washington Fertilizer Co., Washington, D. C.               | To collect and dispose of garbage, etc.                                                                                              |
| 2888 | Dec. 19, 1900 | Cranford Paving Co., Washington, D. C.                     | Complete foundation of piers for a bridge across Rock Creek on line of Connecticut avenue extended.                                  |
| 2890 | Jan. 9, 1901  | Pavarini & Greer, Washington, D. C.                        | Construct complete an 8-room school building northwest corner Twelfth and D streets NE.                                              |
| 2892 | Jan. 28, 1901 | Meads & Reynolds, Washington, D. C.                        | Construct complete a police station on Whitney avenue, between Sherman and Brightwood avenue.                                        |
| 2895 | Mar. 9, 1901  | M. J. Drummond, New York City                              | Fire hydrants.                                                                                                                       |
| 2896 | Mar. 16, 1901 | W. E. Speir, Washington, D. C. ....                        | Construct rear wing of workhouse.                                                                                                    |
| 2897 | Mar. 19, 1901 | Camden Iron Works, Philadelphia, Pa.                       | Furnish and erect pumping engine for sewerage pumping station.                                                                       |
| 2898 | Mar. 20, 1901 | H. E. Burgess, Washington, D. C. ....                      | Construct receiving ward at Washington Asylum.                                                                                       |
| 2900 | Apr. 8, 1901  | D. F. Mockabee, Washington, D. C. ..                       | Construct 8-room school building on lots 6 and 7, square 653.                                                                        |
| 2901 | Apr. 5, 1901  | Sanitary Street Sweeping Co., Washington, D. C.            | Furnish hand street-sweeping machines.                                                                                               |
| 2903 | Apr. 11, 1901 | Jas. M. Dunn, Washington, D. C. ....                       | Construct 8-room school building at Third and K streets SW.                                                                          |
| 2904 | Apr. 16, 1901 | Cranford Paving Co., Washington, D. C.                     | Improving the grounds of the truck house on Whitney avenue, near Fourteenth street.                                                  |
| 2905 | Apr. 13, 1901 | W. S. Moore's Sons, Alexandria, Va.                        | Furnish engine, wheel shaft, etc., in harbor boat Vigilant.                                                                          |
| 2907 | Apr. 22, 1901 | Pavarini & Greer, Washington, D. C.                        | Construct 8-room schoolhouse in California avenue, between Eighteenth street and Florida avenue NW.                                  |
| 2912 | May 4, 1901   | E. J. Hannan, Washington, D. C. ....                       | Construct all drainage, plumbing, and gasfitting in grounds of the Industrial Home School.                                           |
| 2913 | Apr. 11, 1901 | Pauely Jail Building and Manufacturing Co., St. Louis, Mo. | Construct all cell work in new wing of workhouse on reservation 13.                                                                  |
| 2914 | May 6, 1901   | Pavarini & Greer, Washington, D. C.                        | Construct, complete 4-room school building, Industrial Home School, on Tennallytown road.                                            |
| 2917 | May 21, 1901  | E. J. Hannan, Washington, D. C. ....                       | Construct all drainage, plumbing, etc., for chemical fire-engine house on Lansing street, between Twelfth and Thirteenth, Brookland. |
| 2919 | May 24, 1901  | Burgess & Parsons, Washington, D. C.                       | Construct chemical fire-engine house, lot 18, block 22, Brookland (Lansing street between Twelfth and Thirteenth).                   |
| 2920 | May 21, 1901  | E. J. Hannan, Washington, D. C. ....                       | Repair and change plumbing in ward 4 of Washington Asylum.                                                                           |
| 2922 | May 24, 1901  | Antonio Malnati, Washington, D. C.                         | Construct a stone wall on south and west sides of Dent School, South Carolina avenue and Second SE.                                  |
| 2923 | June 7, 1901  | C. A. Schneider's Sons, Washington, D. C.                  | Furnish and erect iron fencing on coping of the Brightwood reservoir.                                                                |
| 2924 | June 4, 1901  | American Development Co., Chicago, Ill.                    | Furnish, operate, and maintain naphtha lamps.                                                                                        |
| 2925 | June 10, 1901 | Welsbach Street Lighting, Philadelphia, Pa.                | Furnish, operate, and maintain Welsbach street lights.                                                                               |
| 2928 | June 19, 1901 | W. W. Biggs Heating and Ventilating Co., Washington, D. C. | Furnish and erect horizontal tubular steam boilers for Central High, Garnet, and Lincoln schools.                                    |
| 2929 | June 20, 1901 | Littlefield, Alvord & Co., Washington, D. C.               | Haul sand, gravel, broken stone, etc.                                                                                                |
| 2930 | June 17, 1901 | William A. Kimmel, Washington, D. C.                       | Construct 2 gate houses at Brightwood reservoir.                                                                                     |
| 2931 | June 22, 1901 | Ellicott Machine Co., Baltimore, Md.                       | Furnish and erect horizontal steam boilers for Force and Jefferson schools.                                                          |
| 2933 | .....do.....  | Springmann's Express Co., Washington, D. C.                | Haul cast-iron water pipe.                                                                                                           |
| 2936 | June 24, 1901 | S. S. Shedd & Bro., Washington, D. C.                      | Repair and change plumbing in Logan, Patterson, Phelps, and Smallwood schools.                                                       |
| 2938 | June 26, 1901 | Cranford Paving Co. ....                                   | Construct concrete arch bridge across Broad Branch on line of Argyle road.                                                           |

*Schedule of proposals for construction of sewers, opened September 8, 1900.*

SEWER A.

[Eighteenth street NW. between Q and Corcoran and New Hampshire avenue between Corcoran and Riggs.]

| Bidder.            | Ordinary excavation. | Brick masonry, natural-cement mortar. | 24-inch pipe. | 21-inch pipe. | 18-inch pipe. | Total.     |
|--------------------|----------------------|---------------------------------------|---------------|---------------|---------------|------------|
| P. D. Vinson ..... | \$0.57               | \$10.75                               | \$0.76        | \$0.64        | \$0.53        | \$1,634.50 |
| Lyons Bros. ....   | .70                  | 13.00                                 | .85           | .79           | .73           | 1,962.80   |

SEWER B.

[S street NW. between Fourteenth and Fifteenth.]

| Bidder.            | Ordinary excavation. | Brick masonry, natural-cement mortar. | 24-inch pipe. | 21-inch pipe. | 18-inch pipe. | Total.     |
|--------------------|----------------------|---------------------------------------|---------------|---------------|---------------|------------|
| P. D. Vinson ..... | \$0.54               | \$10.75                               | \$0.74        | \$0.63        | \$0.52        | \$1,472.62 |
| Lyons Bros. ....   | 1.10                 | 13.75                                 | 1.10          | 1.00          | .95           | 2,619.30   |

SEWER C.

[Fourteenth street NW. between R and S.]

| Bidder.            | Ordinary excavation. | Brick masonry, natural-cement mortar. | 15-inch pipe. | 12-inch pipe. | Total.     |
|--------------------|----------------------|---------------------------------------|---------------|---------------|------------|
| P. D. Vinson ..... | \$0.54               | \$10.75                               | \$0.49        | \$0.42        | \$1,145.75 |
| Lyons Bros. ....   | 1.10                 | 13.75                                 | .80           | .75           | 2,107.50   |

SEWER D.

[L street NW. between Sixteenth and Twentieth.]

| Bidder.            | Ordinary excavation. | Brick masonry, natural-cement mortar. | Vitrified-brick masonry, part-cement mortar. | Concrete masonry, natural-cement mortar. | Concrete masonry, part-cement mortar. | Total.      |
|--------------------|----------------------|---------------------------------------|----------------------------------------------|------------------------------------------|---------------------------------------|-------------|
| P. D. Vinson ..... | \$0.54               | \$9.60                                | \$17.00                                      | \$5.27                                   | \$6.77                                | \$20,285.32 |
| Lyons Bros. ....   | .80                  | 12.50                                 | 22.50                                        | 7.50                                     | 9.50                                  | 28,632.70   |
| B. J. Coyle .....  | .57                  | 10.40                                 | 20.00                                        | 7.40                                     | 8.90                                  | 24,182.43   |
| John Jacoby .....  | .70                  | 10.00                                 | 20.00                                        | 5.50                                     | 7.75                                  | 24,025.55   |

*Proposals for construction of sewers, opened November 24, 1900.*

| Bidder.                   | Ordinary excavation. | Em-bankment. | Red-brick masonry, natural-cement mortar. | Red-brick masonry, Portland-cement mortar. | Vitrified-brick masonry, Portland-cement mortar. | Concrete masonry, natural cement. | Concrete masonry, Portland cement. | Total.       |
|---------------------------|----------------------|--------------|-------------------------------------------|--------------------------------------------|--------------------------------------------------|-----------------------------------|------------------------------------|--------------|
| Lyons Bros. ....          | \$0.30               | \$0.20       | \$8.96                                    | \$10.97                                    | \$15.92                                          | \$4.65                            | \$7.00                             | \$167,724.35 |
| John Jacoby .....         | .30                  | .18          | 8.50                                      | 10.00                                      | 18.00                                            | 4.20                              | 6.00                               | 159,716.00   |
| B. F. Sweeten & Son. .... | .61                  | .15          | 9.59                                      | 12.09                                      | 17.20                                            | 5.57                              | 8.24                               | 196,046.35   |
| B. J. Coyle & Co. ....    | .38                  | .30          | 9.50                                      | 12.00                                      | 18.00                                            | 5.90                              | 8.00                               | 192,577.00   |
| Vinson & Michael. ....    | .30                  | .18          | 8.00                                      | 11.47                                      | 17.40                                            | 4.83                              | 6.41                               | 161,765.85   |
| Andrew Gleeson. ....      | .35½                 | .12½         | 8.60                                      | 11.96                                      | 17.46                                            | 5.00                              | 7.03                               | 170,584.00   |

*Schedule of proposals for constructing gates, connections, and outlet section of the Tiber Creek and New Jersey avenue high level intercepting sewer, opened January 26, 1901.*

| Bidder.        | Outlet section and tide gates. |                                           |                                                  |                                          |                                               |                                               |         |         |                |                       |             |
|----------------|--------------------------------|-------------------------------------------|--------------------------------------------------|------------------------------------------|-----------------------------------------------|-----------------------------------------------|---------|---------|----------------|-----------------------|-------------|
|                | Ordinary excavation.           | Red-brick masonry, natural-cement mortar. | Vitrified-brick masonry, Portland-cement mortar. | Concrete masonry, natural-cement mortar. | Concrete masonry "A," Portland-cement mortar. | Concrete masonry "B," Portland-cement mortar. | Piling. | Lumber. | Steel I beams. | Cast-iron bed plates. | Tide gates. |
| Andrew Gleeson | \$0.98                         | \$1.80                                    | \$18.80                                          | \$4.85                                   | \$3.70                                        | \$6.90                                        | \$0.38  | \$30.00 | \$0.05         | \$0.04                | \$249.50    |
| John Jacoby    | 1.00                           | 10.00                                     | 20.00                                            | 6.00                                     | 12.00                                         | 8.00                                          | .30     | 30.00   | .03            | .02                   | 225.00      |
|                |                                |                                           |                                                  |                                          |                                               |                                               |         |         |                |                       | \$58.75     |
|                |                                |                                           |                                                  |                                          |                                               |                                               |         |         |                |                       | \$3.00      |
|                |                                |                                           |                                                  |                                          |                                               |                                               |         |         |                |                       | \$71.25     |
|                |                                |                                           |                                                  |                                          |                                               |                                               |         |         |                |                       | \$5.00      |
|                |                                |                                           |                                                  |                                          |                                               |                                               |         |         |                |                       | \$85.00     |

| Bidder.        | Connection with Tiber sewer. |                                           |                                                  |                                          |                                 | Connection with Indiana avenue main sewer. |                                           |                                                  |                                   | Total.      |
|----------------|------------------------------|-------------------------------------------|--------------------------------------------------|------------------------------------------|---------------------------------|--------------------------------------------|-------------------------------------------|--------------------------------------------------|-----------------------------------|-------------|
|                | Ordinary excavation.         | Red-brick masonry, natural-cement mortar. | Vitrified-brick masonry, Portland-cement mortar. | Concrete masonry, natural-cement mortar. | Rubble masonry, natural cement. | Ordinary excavation.                       | Red-brick masonry, natural-cement mortar. | Vitrified-brick masonry, Portland-cement mortar. | Concrete masonry, natural cement. |             |
| Andrew Gleeson | \$1.50                       | \$12.00                                   | \$20.00                                          | \$7.50                                   | \$6.50                          | \$1.50                                     | \$12.00                                   | \$20.00                                          | \$7.00                            | \$84,504.50 |
| John Jacoby    | 1.00                         | 10.00                                     | 20.00                                            | 6.00                                     | 6.50                            | 1.25                                       | 14.00                                     | 21.00                                            | 7.00                              | 87,743.50   |

*Schedule of proposals for construction of sewers opened April 20, 1901.*

## SEWER A.

| Bidder.             | Ordinary excavation. | Brick masonry. | 15-inch pipe. | Total cost. |
|---------------------|----------------------|----------------|---------------|-------------|
| J. P. Larguey       | \$0.43               | \$12.00        | \$0.60        | \$2,407.20  |
| M. F. McNamara & Co | .48                  | 12.75          | .79           | 2,986.10    |
| M. F. Talty         | .69                  | 13.50          | .45           | 2,502.75    |
| Lyons Bros          | .48                  | 12.00          | .69           | 2,724.60    |
| Jas. A. Coyle       | .55                  | 11.00          | .65           | 2,737.25    |

## SEWER B.

| Bidder.             | Ordinary excavation. | Rock excavation. | Brick masonry. | 15-inch pipe. | 12-inch pipe. | 10-inch pipe. | Total cost. |
|---------------------|----------------------|------------------|----------------|---------------|---------------|---------------|-------------|
| J. P. Larguey       | \$0.70               | \$6.00           | \$12.00        | \$0.60        | \$0.49        | \$0.43        | \$10,890.40 |
| M. F. McNamara & Co | .60                  | 2.50             | 12.75          | .78           | .60           | .53           | 6,557.80    |
| M. F. Talty         | .69                  | 3.00             | 14.00          | .45           | .38           | .30           | 6,706.40    |
| Lyons Bros          | .75                  | 5.00             | 12.00          | .69           | .67           | .61           | 10,085.60   |
| Jas. A. Coyle       | .70                  | 4.00             | 11.00          | .70           | .58           | .45           | 8,513.80    |

*Schedule of proposals for construction of sewers, etc.—Continued.*

## SEWER C.

| Bidder.                  | Ordinary excavation. | Brick masonry. | 24-inch pipe. | 15-inch pipe. | Total cost. |
|--------------------------|----------------------|----------------|---------------|---------------|-------------|
| John Jacoby.....         | \$0.35               | \$10.50        | \$1.00        | \$0.85        | \$3,818.50  |
| M. F. Talty.....         | .69                  | 14.00          | .65           | .45           | 4,479.50    |
| Jno. F. Talbert.....     | .80                  | 10.25          | .70           | .55           | 4,914.75    |
| M. F. McNamara & Co..... | .80                  | 12.00          | 1.16          | .75           | 5,894.40    |
| Lyons Bros.....          | 1.00                 | 12.00          | .99           | .85           | 6,381.10    |

## SEWER D.

| Bidder.              | Ordinary excavation. | Brick masonry. | Vitrified brick masonry. | Concrete masonry, natural-cement mortar. | Concrete masonry, Portland-cement mortar. | Inverted blocks. | Total cost. |
|----------------------|----------------------|----------------|--------------------------|------------------------------------------|-------------------------------------------|------------------|-------------|
| John P. Larguey..... | \$0.55               | \$10.25        | \$17.00                  | \$5.25                                   | \$7.35                                    | \$0.70           | \$2,091.55  |
| M. F. Talty.....     | .69                  | 14.00          | 22.00                    | 5.00                                     | 6.00                                      | .80              | 2,351.50    |
| Jno. F. Talbert..... | .62                  | 10.50          | 17.25                    | 5.00                                     | 7.50                                      | .70              | 2,169.50    |
| Lyons Bros.....      | .50                  | 11.50          | 19.00                    | 6.50                                     | 8.00                                      | .74              | 2,221.50    |

*Schedule of proposals received for sewer construction, opened June 18, 1901.*

## SEWER A.

[Fourteenth street NW., between N and Rhode Island avenue.]

| Bidder.                 | Excavation. | Brick masonry. | 15-inch pipe. | 12-inch pipe. | 10-inch pipe. | Total cost. |
|-------------------------|-------------|----------------|---------------|---------------|---------------|-------------|
| Lyons Bros.....         | \$0.65      | \$10.50        | \$0.75        | \$0.71        | \$0.68        | \$1,704.50  |
| Warren F. Brenizer..... | .68         | 12.00          | .74           | .66           | .66           | 1,745.60    |
| P. D. Vinson.....       | .80         | 11.25          | .70           | .65           | .60           | 1,840.00    |
| E. G. Gummel.....       | 1.00        | 12.50          | .77           | .65           | .56           | 2,114.60    |

## SEWER B.

[M street NW., between Seventh and Eighth, and in alley, square 424.]

| Bidder.                 | Excavation. | Brick masonry. | 21-inch pipe. | 18-inch pipe. | 15-inch pipe. | 12-inch pipe. | Total cost. |
|-------------------------|-------------|----------------|---------------|---------------|---------------|---------------|-------------|
| Lyons Bros.....         | \$0.65      | \$10.75        | \$0.93        | \$0.85        | \$0.75        | \$0.71        | \$1,716.05  |
| Warren F. Brenizer..... | .65         | 12.00          | .91           | .80           | .71           | .625          | 1,682.92    |
| P. D. Vinson.....       | 1.20        | 11.25          | .85           | .75           | .75           | .65           | 2,382.75    |
| E. G. Gummel.....       | 1.00        | 12.50          | 1.00          | .89           | .77           | .65           | 2,203.25    |

## SEWER C.

[Thirteenth street SW., between B and D.]

| Bidder.                 | Excavation. | Brick masonry. | 21-inch pipe. | 18-inch pipe. | 12-inch pipe. | Total cost. |
|-------------------------|-------------|----------------|---------------|---------------|---------------|-------------|
| Lyons Bros.....         | \$0.65      | \$10.75        | \$0.93        | \$0.85        | \$0.71        | \$1,694.75  |
| Warren F. Brenizer..... | .65         | 12.00          | .99           | .89           | .73           | 1,744.55    |
| P. D. Vinson.....       | .95         | 11.50          | .85           | .75           | .65           | 2,007.75    |
| E. G. Gummel.....       | 1.00        | 12.50          | 1.00          | .89           | .65           | 2,175.80    |

## SEWER D.

[Twenty-second street NW., between Virginia avenue and G.]

| Bidder.                 | Excavation. | Brick masonry. | 18-inch pipe. | 12-inch pipe. | Total cost. |
|-------------------------|-------------|----------------|---------------|---------------|-------------|
| Lyons Bros.....         | \$0.65      | \$10.75        | \$0.85        | \$0.71        | \$942.85    |
| Warren F. Brenizer..... | .61         | 12.00          | .78           | .61           | 876.90      |
| P. D. Vinson.....       | .75         | 11.25          | .70           | .65           | 956.75      |
| E. G. Gummel.....       | 1.00        | 12.50          | .89           | .65           | 1,203.80    |

*Schedule of proposals received for sewer construction, etc.—Continued.*

## SEWER E.

[Twelfth street SW., between D and Virginia avenue.]

| Bidder.                  | Excava-<br>tion. | Brick<br>masonry. | 18-inch<br>pipe. | 15-inch<br>pipe. | 12-inch<br>pipe. | Total cost. |
|--------------------------|------------------|-------------------|------------------|------------------|------------------|-------------|
| Lyons Bros .....         | \$0.635          | \$12.00           | \$0.78           | \$0.69           | \$0.625          | \$2,072.10  |
| Warren F. Brenizer ..... | .70              | 11.25             | .75              | .70              | .60              | 2,131.50    |
| P. D. Vinson .....       | .65              | 10.75             | .85              | .75              | .71              | 2,157.70    |
| E. G. Gummel .....       | 1.00             | 12.50             | .89              | .77              | .65              | 2,739.50    |

## SEWER F.

[North Capitol street sewer, between G and K streets.]

| Bidder.                  | Excava-<br>tion. | Brick<br>masonry,<br>natural<br>cement. | Vitrified<br>brick<br>masonry,<br>Portland<br>cement. | Concrete<br>mason-<br>ry, nat-<br>ural<br>cement. | Concrete<br>mason-<br>ry, Port-<br>land<br>cement. | Total<br>cost. |
|--------------------------|------------------|-----------------------------------------|-------------------------------------------------------|---------------------------------------------------|----------------------------------------------------|----------------|
| Lyons Bros .....         | \$3.00           | \$13.25                                 | \$42.00                                               | \$10.00                                           | \$12.00                                            | \$8,563.50     |
| Warren F. Brenizer ..... | 1.85             | 19.00                                   | 30.00                                                 | 7.10                                              | 13.00                                              | 6,704.50       |

*Schedule of proposals received June 22, 1901, for the construction of sewers.*

## SEWER A.

[Sewer from Third and Cincinnati streets NE. through grounds of W. W. Davidge and Trinity College to Michigan avenue.]

| Bidder.                                                              | Ordinary<br>excava-<br>tion. | Brick ma-<br>sonry,<br>natural-<br>cement<br>mortar. | Vitrified<br>brick<br>masonry,<br>Portland-<br>cement<br>mortar. | Concrete<br>masonry,<br>natural-<br>cement<br>mortar. | Concrete<br>masonry,<br>Portland-<br>cement<br>mortar. | Total.      |
|----------------------------------------------------------------------|------------------------------|------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------|-------------|
| E. G. Gummel .....                                                   | \$0.50                       | \$10.05                                              | \$17.50                                                          | \$5.20                                                | \$6.25                                                 | \$20,385.00 |
| John Jacoby .....                                                    | .36                          | 10.50                                                | 19.00                                                            | 5.00                                                  | 6.50                                                   | 19,307.00   |
| American Artificial Stone<br>Pavement and Construc-<br>tion Co ..... | .75                          | 12.54                                                | 19.91                                                            | 6.11                                                  | 7.76                                                   | 25,720.70   |
| John F. Talbert .....                                                | .37                          | 11.50                                                | 18.00                                                            | 5.12                                                  | 7.50                                                   | 20,468.40   |
| Lyons Bros .....                                                     | .60                          | 12.00                                                | 20.00                                                            | 5.50                                                  | 7.00                                                   | 22,982.50   |
| Larguey & Cavan .....                                                | .45                          | 11.50                                                | 17.25                                                            | 5.50                                                  | 7.40                                                   | 21,283.75   |
| W. F. Brenizer .....                                                 | .55                          | 11.25                                                | 19.00                                                            | 5.10                                                  | 6.60                                                   | 21,468.25   |
| R. A. Malone & Co .....                                              | .50                          | 9.00                                                 | 14.00                                                            | 4.75                                                  | 6.70                                                   | 19,406.25   |

## SEWER B.

[Hartford street NE., between Seventh and Ninth streets, and in Seventh street NE., between Galena and Hartford.]

| Bidder.                 | Ordinary<br>excava-<br>tion. | Brick ma-<br>sonry,<br>nat-<br>ural-<br>cement<br>mortar. | Vitri-<br>fied<br>brick<br>ma-<br>sonry,<br>Port-<br>land-<br>cement<br>mortar. | Con-<br>crete<br>ma-<br>sonry,<br>nat-<br>ural-<br>cement<br>mortar. | Con-<br>crete<br>ma-<br>sonry,<br>Port-<br>land-<br>cement<br>mortar. | Vitri-<br>fied<br>brick<br>in-<br>verts,<br>Port-<br>land-<br>cement<br>mortar. | 24-inch<br>pipe<br>sewer. | 21-inch<br>pipe<br>sewer. | Total.     |
|-------------------------|------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------|---------------------------|------------|
| E. G. Gummel .....      | \$1.00                       | \$12.50                                                   | \$19.75                                                                         | \$5.50                                                               | \$6.75                                                                | \$0.85                                                                          | \$1.25                    | \$1.10                    | \$4,511.00 |
| W. F. Brenizer .....    | 1.25                         | 12.00                                                     | 22.00                                                                           | 5.25                                                                 | 6.60                                                                  | .80                                                                             | 1.60                      | 1.45                      | 5,222.25   |
| R. A. Malone & Co ..... | .60                          | 9.00                                                      | 15.00                                                                           | 5.00                                                                 | 7.00                                                                  | 1.25                                                                            | 2.00                      | 2.00                      | 4,253.50   |

*Schedule of proposals received, etc., for the construction of sewers—Continued.*

SEWER C.

[Arizona avenue, north from New Cut road.]

| Bidder.                                                       | Ordinary<br>excavation. | Rock<br>excavation. | Em-<br>bankment. | Brick<br>ma-<br>sonry,<br>nat-<br>ural-<br>cement<br>mor-<br>tar. | Vitri-<br>fied<br>brick<br>ma-<br>sonry,<br>Port-<br>land-<br>cement<br>mor-<br>tar. | Con-<br>crete<br>ma-<br>sonry,<br>nat-<br>ural-<br>cement<br>mor-<br>tar. | Con-<br>crete<br>ma-<br>sonry,<br>Port-<br>land-<br>cement<br>mor-<br>tar. | 6-inch<br>pipe<br>drain. | Total.      |
|---------------------------------------------------------------|-------------------------|---------------------|------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------|-------------|
| E. G. Gaudin & Co.                                            | \$0.65                  | \$3.00              | \$0.40           | \$12.75                                                           | \$21.00                                                                              | \$5.00                                                                    | \$6.50                                                                     | \$0.20                   | \$27,388.75 |
| John J. Kelly.                                                | .60                     | 4.00                | .20              | 12.50                                                             | 19.00                                                                                | 5.50                                                                      | 7.60                                                                       | .15                      | 27,338.50   |
| American Artificial<br>Stone Pavement and<br>Construction Co. | .51                     | 3.00                | .75              | 12.54                                                             | 19.91                                                                                | 6.11                                                                      | 7.76                                                                       | .05                      | 28,450.95   |
| W. F. Bremer.                                                 | .55                     | 4.00                | .25              | 11.80                                                             | 16.00                                                                                | 5.00                                                                      | 7.00                                                                       | .15                      | 25,848.80   |
| W. F. Bremer.                                                 | .59                     | 4.00                | .25              | 11.20                                                             | 16.60                                                                                | 4.80                                                                      | 7.20                                                                       | .15                      | 26,229.80   |
| R. A. Malone & Co.                                            | .45                     | 3.00                | .25              | 8.75                                                              | 14.00                                                                                | 4.75                                                                      | 6.75                                                                       | .25                      | 23,264.00   |

SEWER D.

[Arizona avenue, beginning at a point 3,300 feet north of New Cut road.]

| Bidder.                                                       | Ordinary<br>excavation. | Rock<br>excavation. | Em-<br>bankment. | Brick<br>ma-<br>sonry,<br>nat-<br>ural-<br>cement<br>mor-<br>tar. | Vitri-<br>fied<br>brick<br>ma-<br>sonry,<br>Port-<br>land-<br>cement<br>mor-<br>tar. | Con-<br>crete<br>ma-<br>sonry,<br>nat-<br>ural-<br>cement<br>mor-<br>tar. | Con-<br>crete<br>ma-<br>sonry,<br>Port-<br>land-<br>cement<br>mor-<br>tar. | 6-inch<br>pipe<br>drain. | Total.      |
|---------------------------------------------------------------|-------------------------|---------------------|------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------|-------------|
| E. G. Gaudin & Co.                                            | \$0.60                  | \$3.00              | \$0.40           | \$12.75                                                           | \$21.00                                                                              | \$5.00                                                                    | \$6.50                                                                     | \$0.20                   | \$30,466.25 |
| John J. Kelly.                                                | .55                     | 4.00                | .20              | 11.50                                                             | 19.50                                                                                | 5.50                                                                      | 7.50                                                                       | .15                      | 31,270.00   |
| American Artificial<br>Stone Pavement and<br>Construction Co. | .51                     | 3.00                | .75              | 12.54                                                             | 19.91                                                                                | 6.11                                                                      | 7.76                                                                       | .05                      | 32,499.15   |
| W. F. Bremer.                                                 | .59                     | 4.00                | .25              | 12.00                                                             | 16.00                                                                                | 5.00                                                                      | 7.00                                                                       | .15                      | 29,532.50   |
| W. F. Bremer.                                                 | .51                     | 4.25                | .20              | 11.20                                                             | 16.60                                                                                | 5.00                                                                      | 6.95                                                                       | .15                      | 28,676.00   |
| R. A. Malone & Co.                                            | .40                     | 3.00                | .25              | 9.00                                                              | 13.75                                                                                | 4.70                                                                      | 6.70                                                                       | .25                      | 25,976.75   |

*Schedule of proposals for constructing Melan arch bridge across Rock Creek, on line of Rock Creek drive, opened October 13, 1900.*

| Bidder.                  | Amount. | Bidder.             | Amount. |
|--------------------------|---------|---------------------|---------|
| Good Construction Co.    | \$2,600 | O'Hearn & Berrigan  | \$3,674 |
| American Bridge Co.      | 4,400   | Cranford Paving Co. | 5,200   |
| Brennan Construction Co. | 3,900   | Chas. A. Hook & Son | 3,900   |
| Amos F. Shaver           | 2,850   |                     |         |

*Schedule of proposals for constructing Melan arch bridge across Rock Creek, on line of Quarry road.*

| Bidder.                  | Amount.  | Cost of<br>additional<br>width per<br>foot. | Decrease<br>in cost for<br>foot of<br>width. |
|--------------------------|----------|---------------------------------------------|----------------------------------------------|
| Good Construction Co.    | \$16,850 | \$300                                       | \$260                                        |
| American Bridge Co.      | 17,400   | 354                                         | 362                                          |
| Brennan Construction Co. | 18,000   | 500                                         | 500                                          |
| Amos F. Shaver.          | 18,400   | 350                                         | 300                                          |
| O'Hearn & Berrigan       | 18,644   | 421                                         | 421                                          |
| Cranford Paving Co.      | 18,700   | 500                                         | 400                                          |
| Chas. A. Hook & Sons     | 19,560   | 1,000                                       | 225                                          |

*Schedule of proposals for construction of concrete arch bridge across Broad Branch on line of the Argyle road, opened June 15, 1901.*

| Bidder.                  | Amount. | Bidder.                       | Amount. |
|--------------------------|---------|-------------------------------|---------|
| Cranford Paving Co ..... | \$3,955 | Arthur Cowsill .....          | \$6,182 |
| M. F. Talty .....        | 3,960   | W. B. Upton Co. ....          | 6,439   |
| Lyons Bros. ....         | 4,670   | Brennan Construction Co ..... | 7,200   |
| Carinsely & Hough .....  | 6,000   |                               | 8,000   |

<sup>1</sup> With gravel.<sup>2</sup> With stone.

*Proposals for constructing foundations for masonry bridge across Rock Creek on line of Connecticut avenue extended, opened December 1, 1900.*

| Bidder.                       | Earth excavation (cubic yard). | Rock excavation (cubic yard). | Concrete foundation (cubic yard). | Total.      |
|-------------------------------|--------------------------------|-------------------------------|-----------------------------------|-------------|
| James C. McGuire .....        | \$0.40                         | \$2.50                        | \$5.50                            | \$81,742.00 |
| Cranford Paving Co. ....      | .64                            | 3.40                          | 5.20                              | 31,522.00   |
| Brennan Construction Co. .... | .86                            | 3.00                          | 5.31                              | 33,338.50   |
| Geisel Construction Co. ....  | .70                            | 3.90                          | 5.40                              | 33,233.00   |
| Andrew Gleeson .....          | .58                            | 1.95                          | 5.06                              | 33,770.00   |
| Lyons & Co .....              | .65                            | 3.50                          | 6.50                              | 37,855.00   |

*Schedule of proposals for grading and regulating streets and avenues, opened July 7, 1900.*

| Bidder.                                    | Grading (square yard). | 6 by 20 inch curb (linear foot). | 8 by 8 inch curb (linear foot). | Cobble gutters (square yard). | Vitrified-block gutters (square yard). |
|--------------------------------------------|------------------------|----------------------------------|---------------------------------|-------------------------------|----------------------------------------|
| Washington Asphalt Block and Tile Co. .... | \$0.32                 | \$0.18                           | \$0.33                          | \$0.16                        | \$0.25                                 |
| Andrew Gleeson .....                       | .32                    | .18                              | .29                             | .38                           | .34                                    |
| M. F. Talty .....                          | .34                    | .20                              | .38                             | .25                           | .30                                    |
| Lyons Bros. ....                           | .35                    | .20                              | .34                             | .27                           | .43                                    |

*Schedule of proposals for grading certain streets and avenues, opened July 7, 1900.*

| Bidder.                    | Cathedral avenue.    | Frankfort street, Langdon. | Crescent street. | South Dakota avenue, etc. |
|----------------------------|----------------------|----------------------------|------------------|---------------------------|
| M. F. Talty .....          | cubic yard. \$0.30   | \$0.32                     | \$0.35           | \$0.30                    |
| G. B. Mullin .....         | do. .32              |                            | .32              |                           |
| Lyons Bros. ....           | do. .30              |                            | .28              |                           |
| P. D. Vinson .....         | do. .41              |                            |                  | .20                       |
| Andrew Gleeson .....       | do. .28              | .34                        | .33              | .20                       |
| Matthew Myers .....        | do. .32              |                            |                  | .30                       |
| Patrick Keelty & Bro. .... | do. { 1.32<br>2.45 } |                            |                  |                           |

<sup>1</sup> Short haul.<sup>2</sup> Long haul.



# OPERATIONS OF THE ENGINEER DEPARTMENT, D. C. 179

*Schedule of proposals for grading Cathedral avenue, opened July 21, 1900.*

| Bidder.             |              | In limits<br>of ave-<br>nue. | Borrow. |        |        |
|---------------------|--------------|------------------------------|---------|--------|--------|
|                     |              |                              | A.      | B.     | C.     |
| W. F. Brenizer..... | cubic yard.. | \$0.24                       | \$0.24  | \$0.39 | \$0.35 |
| Andrew Gleeson..... | do.....      | .26                          | .27     | .38    | .37½   |
| Thomas M. Bond..... | do.....      | .24½                         | .24½    | .41    | .43    |

*Proposals for grading Adams Mill road, opened March 30, 1901.*

| Bidder.              | Price.<br>per<br>cubic<br>yard. | Bidder.              | Price.<br>per<br>cubic<br>yard. |
|----------------------|---------------------------------|----------------------|---------------------------------|
| Andrew Gleeson.....  | \$0.22                          | Pitts & Hawkins..... | \$0.29                          |
| Carmody & Hough..... | .225                            | John Jacoby.....     | .33                             |
| M. F. Talty.....     | .23                             | Lyons Bros.....      | .36                             |

*Schedule of proposals for grading Columbia road east of Thirteenth street NW., opened April 13, 1901.*

| Bidder.               | Price<br>per<br>cubic<br>yard. | Bidder.          | Price<br>per<br>cubic<br>yard. |
|-----------------------|--------------------------------|------------------|--------------------------------|
| J. C. Regan & Co..... | \$0.23                         | Lyons Bros.....  | \$0.30                         |
| Carmody & Hough.....  | .26                            | M. F. Talty..... | .31                            |
| Andrew Gleeson.....   | .30                            |                  |                                |

*Schedule of proposals for grading Connecticut avenue west of Rock Creek.*

| Bidder.               | Price<br>per<br>cubic<br>yard. | Bidder.                  | Price<br>per<br>cubic<br>yard. |
|-----------------------|--------------------------------|--------------------------|--------------------------------|
| J. C. Regan & Co..... | \$0.42                         | John Jacoby.....         | \$0.50                         |
| Carmody & Hough.....  | .43                            | M. F. McNamara & Co..... | .58                            |
| Lyons Bros.....       | .43                            | Pitts & Hawkins.....     | .57                            |
| G. B. Mullin.....     | .47                            |                          |                                |

*Schedule of proposals received May 4, 1901, for grading certain streets and avenues.*

| Bidder.                            | Joliet<br>street. | Blagden<br>avenue. | Illinois<br>avenue. | Ne-<br>braska<br>avenue. |
|------------------------------------|-------------------|--------------------|---------------------|--------------------------|
| Pitts, Hawkins & Trundle.....      | cubic yard..      | \$0.285            | \$0.63              | \$0.27                   |
| M. F. Talty.....                   | do.....           | .38                | .45                 | .30                      |
| G. B. Mullin.....                  | do.....           |                    | .38                 | .31                      |
| Killeen & Ball.....                | do.....           | .445               | .32                 | .345                     |
| John Jacoby.....                   | do.....           | .23                | .55                 | .28                      |
| Andrew Gleeson.....                | do.....           | .39                | .40                 | .235                     |
| Sampson & Smith.....               | do.....           |                    |                     | .25                      |
| G. C. Birmingham.....              | do.....           |                    |                     | .25                      |
| R. A. Malone.....                  | do.....           | .25                |                     | .25                      |
| Matthew Myers.....                 | do.....           | .30                |                     |                          |
| Tait, Burrows Constructing Co..... | do.....           |                    | .24                 |                          |
| W. H. H. Allen.....                | do.....           |                    |                     | .294                     |
| Lyons Bros.....                    | do.....           | .45                | .40                 | .35                      |
|                                    | do.....           | .35                | .4975               | .26                      |
|                                    | do.....           |                    |                     | .35                      |

*Schedule of proposals for paving streets and avenues with sheet asphalt, opened June 1, 1901.*

## ASPHALT SURFACE.

| Bidder.                        | Gutters.                     |         | Pavement A. |                           |              |  |
|--------------------------------|------------------------------|---------|-------------|---------------------------|--------------|--|
|                                | Vitrified brick.             | Cement. | Price.      | Total, including gutters. |              |  |
|                                |                              |         |             | Vitrified brick.          | Cement.      |  |
| Barber Asphalt Paving Co.....  | A \$1.42<br>B 1.50<br>C 1.69 | \$2.65  | \$1.795     | \$124,070.00              | \$135,140.00 |  |
| Brennan Construction Co.....   | A 1.37<br>B 1.38<br>C 1.40   |         |             |                           |              |  |
| Cranford Paving Co.....        | A 1.27<br>B 1.35<br>C 1.40   |         |             |                           |              |  |
| Warner Quinlan Asphalt Co..... | A 1.09<br>B 1.09<br>C 1.09   | 1.72    | 1.72        | 116,450.00                | 122,120.00   |  |

| Bidder.                        | Pavement B. |                           |              | Pavement C. |                           |              |
|--------------------------------|-------------|---------------------------|--------------|-------------|---------------------------|--------------|
|                                | Price.      | Total, including gutters. |              | Price.      | Total, including gutters. |              |
|                                |             | Vitrified brick.          | Cement.      |             | Vitrified brick.          | Cement.      |
| Barber Asphalt Paving Co.....  | \$1.90      | \$131,300.00              | \$141,650.00 | \$1.98      | \$137,970.00              | \$146,610.00 |
| Brennan Construction Co.....   | 1.76        | 121,540.00                | 133,420.00   | 1.78        | 122,960.00                | 134,690.00   |
| Cranford Paving Co.....        | 1.84        | 126,230.00                | 135,680.00   | 1.92        | 131,640.00                | 140,640.00   |
| Warner Quinlan Asphalt Co..... | 1.72        | 116,450.00                | 122,120.00   | 1.72        | 116,450.00                | 122,120.00   |

*Schedule of proposals for paving Bladensburg road with asphalt and granite blocks, opened April 20, 1901.*

| Bidder.                        | Amount.  |
|--------------------------------|----------|
| Barber Asphalt Paving Co. .... | \$14,878 |
| Cranford Paving Co. ....       | 14,980   |

*Schedule of proposals for laying cement sidewalks, opened October 13, 1900.*

| Bidder.                               | Class A. | Class B. | Total.      |
|---------------------------------------|----------|----------|-------------|
| Colburn Paving Co. .... square yard.. | \$1.054  | \$1.184  | \$95,287.50 |
| Cranford Paving Co. .... do.....      | 1.08     | 1.16     | 66,000.00   |
| Brennan Construction Co. .... do..... | 1.09     | 1.16     | 66,450.00   |
| F. M. Kemp & Sons .... do.....        | 1.11     | 1.18     | 67,650.00   |

*Schedule of proposals for laying certain cement sidewalks, opened October 1, 1900.*

| Bidder.                       | Price. | Amount.    |
|-------------------------------|--------|------------|
| Fred Drew .....               | \$0.98 | \$1,764.00 |
| Cranford Paving Co. ....      | 1.07   | 1,926.00   |
| Colburn Paving Co. ....       | 1.20   | 2,160.00   |
| Brennan Construction Co. .... | 1.11   | 1,998.00   |

*Schedule of proposals for constructing an eight-room school building on Fifteenth street NE., between Rosedale and Gales streets, opened June 30, 1900.*

| Bidder.                 | Complete, galvan-ized-iron cornice. | Complete, copper cornice. | Cement mortar through-out, extra. | Floor with steel gird-ers in school rooms, extra. |
|-------------------------|-------------------------------------|---------------------------|-----------------------------------|---------------------------------------------------|
| D. F. Mockabee.....     | \$27, 168                           | \$28, 078                 | \$345                             | \$653                                             |
| J. M. Dunn.....         | 30, 986                             | 31, 540                   | 600                               | 295                                               |
| Gleeson & Humphrey..... | 32, 000                             | 32, 500                   | 600                               | 600                                               |
| Pavarini & Greer.....   | 34, 990                             | 35, 300                   | 450                               | 900                                               |
| John Hughes, jr.....    | 35, 465                             | 35, 690                   | 300                               | 592                                               |

*Schedule of proposals for constructing an eight-room school building, northeast corner South Carolina avenue and Second street SE., opened June 30, 1900.*

| Bidder.              | Amount.   | Bidder.                 | Amount.   |
|----------------------|-----------|-------------------------|-----------|
| J. M. Dunn.....      | \$31, 380 | Pavarini & Greer.....   | \$34, 070 |
| Geo. W. Corbett..... | 32, 475   | Gleeson & Humphrey..... | 34, 500   |
| D. F. Mockabee.....  | 33, 999   | J. Hughes, jr.....      | 35, 813   |

*Schedule of proposals for improving the grounds of the Hubbard School, opened July 7, 1900.*

| Bidder.                     | Sodding.       |         | Cement pavement. |             | Total.      |
|-----------------------------|----------------|---------|------------------|-------------|-------------|
|                             | Price.         | Amount. | Price.           | Amount.     |             |
|                             | <i>Sq. yd.</i> |         | <i>Sq. yd.</i>   |             |             |
| The Cranford Paving Co..... | \$0.25         | \$75.00 | \$1.25           | \$1, 500.00 | \$1, 575.00 |
| H. T. Burrows.....          | .25            | 75.00   | 1.25             | 1, 500.00   | 1, 575.00   |
| Fred Drew.....              | .35            | 105.00  | 1.31             | 1, 572.00   | 1, 677.00   |
| Colburn Paving Co.....      | .40            | 120.00  | 1.38½            | 1, 662.00   | 1, 782.00   |
| Lyons Bros.....             | .25            | 75.00   | 1.44             | 1, 728.00   | 1, 803.00   |
| John H. Ellis.....          |                | 110.00  | (1)              | (1)         | (1)         |

<sup>1</sup> Informal; no deposit.

*Schedule of proposals for constructing a four-room school building at Takoma Park, opened July 21, 1900.*

| Bidder.               | Amount.      | Bidder.                 | Amount.      |
|-----------------------|--------------|-------------------------|--------------|
| John C. Louthan.....  | \$21, 084.80 | Gleeson & Humphrey..... | \$21, 000.00 |
| Pavarini & Greer..... | 18, 400.00   | H. E. Burgess.....      | 17, 136.00   |

*Schedule of proposals for constructing a chemical-engine house for fire department, corner Fortieth and Xenia streets NW., opened July 21, 1900.*

| Bidder.               | Amount.   |
|-----------------------|-----------|
| Pavarini & Greer..... | \$16, 400 |
| John Hughes, jr.....  | 16, 195   |

*Proposals for constructing a hot-air, hot-blast heating apparatus with mechanical ventilating appliances combined, for a four-room school building, Takoma Park.*

| Bidder.                             | Amount.  |
|-------------------------------------|----------|
| H. I. Gregory.....                  | \$2, 200 |
| H. I. Gregory (gravity system)..... | 1, 550   |

# 182 OPERATIONS OF THE ENGINEER DEPARTMENT, D. C.

*Schedule of proposals for constructing a manual training school building on south side of P street NW., between First and Third streets, opened July 28, 1900.*

| Bidder.                    | Amount.   | Bidder.                | Amount.   |
|----------------------------|-----------|------------------------|-----------|
| Arthur Cowsill .....       | \$114,450 | Pavarini & Greer ..... | \$119,000 |
| Richardson & Burgess ..... | 117,250   | E. Landvoight .....    | 112,400   |
| Saml. Prescott & Co .....  | 117,989   | W. Kimmel .....        | 121,000   |
| Gleeson & Humphrey .....   | 118,000   | D. F. Mockabee .....   | 124,262   |
| Meads & Reynolds .....     | 118,794   | John Hughes, jr. ....  | 127,400   |

*Schedule of proposals for constructing an eight-room school building on lot 1, block 9, Barry Farm, Nichols avenue, Anacostia, opened September 1, 1900.*

| Bidder.                  | Amount.     |             |
|--------------------------|-------------|-------------|
|                          | Proposal 1. | Proposal 2. |
| Gleeson & Humphrey ..... | \$34,800    | \$33,500    |
| Pavarini & Greer .....   | 35,400      | 33,750      |

*Schedule of proposals for constructing a manual training school at southeast corner Rhode Island avenue and Seventh street NW., opened September 22, 1900.*

| Bidder.                  | Amount.   | Bidder.                    | Amount.   |
|--------------------------|-----------|----------------------------|-----------|
| W. E. Speir .....        | \$105,680 | Richardson & Burgess ..... | \$113,317 |
| W. A. Kimmel .....       | 107,000   | Meads & Reynolds .....     | 118,750   |
| Gleeson & Humphrey ..... | 109,900   | Noble H. Thomas .....      | 122,900   |
| W. C. Morrison .....     | 113,894   | Henry F. Getz .....        | 124,950   |

*Schedule of proposals for constructing brick corridor, etc., at Girls' Reform School, opened September 26, 1900.*

| Bidder.                | Amount. |
|------------------------|---------|
| Pavarini & Greer ..... | \$6,900 |
| D. F. Mockabee .....   | 8,100   |

*Proposals for constructing police station on block 10, south side of Whitney avenue, between Sherman and Brightwood avenues NW.*

| Bidder.                 | For building complete. | For plumbing work. | For cell work. |
|-------------------------|------------------------|--------------------|----------------|
| Meads & Reynolds .....  | \$24,600               | .....              | .....          |
| John Hughes, jr. ....   | 24,825                 | .....              | .....          |
| Pavarini & Greer .....  | 26,500                 | .....              | .....          |
| W. E. Speir .....       | 27,460                 | .....              | .....          |
| D. F. Mockabee .....    | 27,951                 | .....              | .....          |
| E. J. Hannan .....      | .....                  | \$2,280            | .....          |
| Jas. Nolan & Sons ..... | .....                  | 2,445              | .....          |
| Champion Iron Co .....  | .....                  | .....              | \$1,050        |
| Van Dorn Iron Co .....  | .....                  | .....              | 1,377          |

*Schedule of proposals for constructing an eight-room school building on northwest corner Twelfth and D streets NE.*

| Bidder.                  | Amount.  | Bidder.               | Amount.  |
|--------------------------|----------|-----------------------|----------|
| Pavarini & Greer .....   | \$34,400 | John Hughes, jr. .... | \$34,700 |
| Gleeson & Humphrey ..... | 35,000   | D. F. Mockabee .....  | 37,300   |
| John C. Louthan .....    | 35,941   |                       |          |

*Schedule of proposals for constructing a rear wing for a new workhouse, opened January 3, 1901.*

| Bidder.                                        | Complete. | Cell construction omitted (deduct). | Cell wing, plumbing omitted (deduct). | Rear wing, cell work complete. | Utility system of cell construction (add). | Locking device. |
|------------------------------------------------|-----------|-------------------------------------|---------------------------------------|--------------------------------|--------------------------------------------|-----------------|
| Gleeson & Humphrey .....                       | \$103,000 | \$33,940                            | \$10,000                              | \$33,900                       | -----                                      | -----           |
| W. E. Speir .....                              | 117,500   | 48,956                              | 12,000                                | -----                          | -----                                      | \$0,050         |
| Van Dorn Iron Works .....                      | 118,372   | -----                               | 22,129                                | 101,243                        | \$2,045                                    | 135             |
| Stewart Iron Works .....                       | -----     | -----                               | 12,000                                | 66,000                         | -----                                      | -----           |
| Pauly Jail Building and Manufacturing Co. .... | -----     | -----                               | 12,000                                | 38,277                         | 44,208                                     | 6,050           |

<sup>1</sup> Per cell.

*Schedule of proposals for constructing a receiving ward, Washington Asylum, opened February 23, 1901.*

| Bidder.                | Amount.  | Bidder.                  | Amount.  |
|------------------------|----------|--------------------------|----------|
| H. E. Burgess .....    | \$12,487 | Meads & Reynolds .....   | \$13,800 |
| Pavarini & Greer ..... | 12,780   | John Hughes, jr. ....    | 14,595   |
| D. F. Mockabee .....   | 13,184   | Gleeson & Humphrey ..... | 17,600   |

*Schedule of proposals for constructing eight-room school building on Half street between N and O streets SW.*

| Bidder.                  | Building complete (steam). | Building complete (hot air). | Plumbing only. |
|--------------------------|----------------------------|------------------------------|----------------|
| D. F. Mockabee .....     | \$38,743                   | \$36,483                     | -----          |
| Plumbing omitted .....   | 35,793                     | 33,533                       | -----          |
| J. M. Dunn .....         | 39,200                     | 36,895                       | -----          |
| Plumbing omitted .....   | 36,000                     | 33,695                       | -----          |
| Gleeson & Humphrey ..... | 39,800                     | 37,900                       | \$3,000        |
| Plumbing omitted .....   | 36,800                     | 34,900                       | -----          |
| Geo. W. Corlett .....    | 42,378                     | 40,100                       | -----          |
| Plumbing omitted .....   | 39,378                     | 37,100                       | -----          |
| W. E. Speir .....        | 43,000                     | 42,000                       | -----          |
| Plumbing omitted .....   | 40,050                     | 39,050                       | -----          |
| Pavarini & Greer .....   | 43,900                     | 41,900                       | -----          |
| Plumbing omitted .....   | 40,700                     | 38,700                       | -----          |
| N. H. Thomas .....       | 46,546                     | -----                        | -----          |
| Plumbing omitted .....   | 43,546                     | -----                        | -----          |
| E. J. Hannan .....       | -----                      | -----                        | 2,950          |
| M. B. Casey .....        | -----                      | -----                        | 3,080          |
| Jas. Nolan & Sons .....  | -----                      | -----                        | 3,234          |

*Schedule of proposals for constructing eight-room school building on Third and K streets SW., opened March 30, 1901.*

| Bidder.                  | Steam heat. |                   | Hot air.                 |                   |                               |                   |
|--------------------------|-------------|-------------------|--------------------------|-------------------|-------------------------------|-------------------|
|                          | Complete.   | Plumbing omitted. | Complete gas propulsion. | Plumbing omitted. | Complete electric propulsion. | Plumbing omitted. |
| J. M. Dunn .....         | \$35,719.00 | \$32,719.00       | \$32,819.00              | \$30,819.00       | \$33,019.00                   | \$30,019.00       |
| G. W. Corbett .....      | 36,045.00   | 33,507.00         | 34,800.00                |                   | 35,000.00                     |                   |
| Pavarini & Greer .....   | 36,700.00   | 33,500.00         | 34,700.00                | 31,500.00         | 34,900.00                     | 31,700.00         |
| Gleeson & Humphrey ..... | 37,800.00   | 34,700.00         | 35,800.00                | 32,700.00         | 36,000.00                     | 33,600.00         |
| Meads & Reynolds .....   | 37,969.00   | 34,871.00         | 35,844.00                | 32,746.00         | 36,044.00                     | 32,946.00         |
| D. F. Mockabee .....     | 37,997.00   | 34,899.00         | 36,282.00                | 33,184.00         | 36,482.00                     | 33,984.00         |
| N. H. Thomas .....       | 38,600.00   | 35,200.00         | 36,600.00                | 33,200.00         | 36,800.00                     |                   |
| W. E. Speir .....        | 39,500.00   | 36,400.00         | 37,300.00                | 34,200.00         | 37,600.00                     | 34,100.00         |
| John Hughes, jr .....    | 41,900.00   | 38,491.65         | 39,900.00                | 36,491.65         | 40,100.00                     | 36,691.65         |

| Bidder.                  | Red brick.            |                   |                                   |                   |                               |                             |
|--------------------------|-----------------------|-------------------|-----------------------------------|-------------------|-------------------------------|-----------------------------|
|                          | Steam heat, complete. | Plumbing omitted. | Complete hot air, gas propulsion. | Plumbing omitted. | Complete electric propulsion. | Plumbing omitted, ing only. |
| J. M. Dunn .....         | \$34,919.00           | \$31,919.00       | \$32,019.00                       | \$29,019.00       | \$32,219.00                   | \$29,219.00                 |
| G. W. Corbett .....      | 35,405.00             |                   | 33,600.00                         |                   | 33,800.00                     |                             |
| Pavarini & Greer .....   | 35,600.00             | 32,400.00         | 33,700.00                         | 31,500.00         | 33,900.00                     | 31,700.00                   |
| Gleeson & Humphrey ..... | 36,800.00             | 33,700.00         | 34,700.00                         | 31,600.00         | 34,900.00                     | 31,900.00                   |
| Meads & Reynolds .....   | 36,984.00             | 33,885.00         | 34,859.00                         | 31,701.00         | 35,059.00                     | 31,961.00                   |
| D. F. Mockabee .....     | 36,735.00             | 33,637.00         | 35,049.00                         | 31,951.00         | 35,249.00                     | 32,151.00                   |
| N. H. Thomas .....       | 37,400.00             | 34,000.00         | 35,400.00                         | 32,000.00         | 35,500.00                     | 32,200.00                   |
| W. E. Speir .....        | 38,600.00             | 35,500.00         | 36,300.00                         | 33,200.00         | 36,500.00                     | 33,100.00                   |
| John Hughes, jr .....    | 40,000.00             | 36,591.65         | 38,000.00                         | 34,591.65         | 38,200.00                     | 34,791.65                   |
| S. S. Shedd & Bro. ....  |                       |                   |                                   |                   |                               | 3,101.65                    |
| M. B. Casey .....        |                       |                   |                                   |                   |                               | 3,098.50                    |
| J. Nolan & Sons .....    |                       |                   |                                   |                   |                               | 3,118.00                    |
| E. J. Hannan .....       |                       |                   |                                   |                   |                               | 3,200.00                    |
|                          |                       |                   |                                   |                   |                               | 3,301.00                    |

*Schedule of proposals for constructing an eight-room school building on California avenue, Washington Heights.*

| Bidder.                  | Steam.              |                   |                      |                   | Hot air.            |                   |                      |                             |
|--------------------------|---------------------|-------------------|----------------------|-------------------|---------------------|-------------------|----------------------|-----------------------------|
|                          | Complete tile roof. | Plumbing omitted. | Complete slate roof. | Plumbing omitted. | Complete tile roof. | Plumbing omitted. | Complete slate roof. | Plumbing omitted, ing only. |
| N. H. Thomas .....       | \$38,900            | \$35,500          | \$38,300             | \$34,900          | \$37,400            | \$34,000          |                      |                             |
| Pavarini & Greer .....   | 41,000              | 38,000            | 40,200               | 37,200            | 38,700              | 35,700            | 37,900               | 34,900                      |
| Gleeson & Humphrey ..... | 41,800              | 38,800            | 41,200               | 38,200            | 39,400              | 36,400            | 38,800               | 35,800                      |
| W. E. Speir .....        | 42,200              | 39,100            | 41,800               | 38,700            | 39,500              | 36,400            | 39,100               | 36,000                      |
| E. J. Hannan .....       |                     |                   |                      |                   |                     |                   |                      | 3,000                       |
| S. S. Shedd & Bro. ....  |                     |                   |                      |                   |                     |                   |                      | 2,068                       |

*Proposals for constructing a four-room school building on the grounds of the Industrial Home School, Tenallytown road, opened April 20, 1901.*

| Bidder.                  | Building complete. | Without plumbing. | Plumbing only. |
|--------------------------|--------------------|-------------------|----------------|
| Pavarini & Greer .....   | \$18,300           | \$16,800          | \$1,700        |
| H. E. Burgess .....      | 19,033             | 17,333            |                |
| Gleeson & Humphrey ..... | 19,700             | 18,250            | 1,500          |
| N. H. Thomas .....       | 20,664             | 19,164            | 1,450          |
| E. J. Hannan .....       |                    |                   | 1,191          |
| S. S. Shedd & Bro. ....  |                    |                   |                |

*Schedule of proposals for constructing stone wall on grounds of Dent School, South Carolina avenue and Second street SE.*

| Bidder.                 | Seneca stone. | Seneca facing and Maynard red sandstone steps and coping. | Hummelstown or Manassas stone. |
|-------------------------|---------------|-----------------------------------------------------------|--------------------------------|
| A. Malnati .....        | \$1,987.00    | \$1,675.00                                                | \$1,560.70                     |
| D. Rothwell & Son ..... | 2,215.40      |                                                           |                                |

*Schedule of proposals for constructing chemical fire-engine house, lot 18, block 22, Lansing street, between Twelfth and Thirteenth streets, Brookland, D. C.*

| Bidder.                  | Building complete. | Track and sleepers omitted. | Building only, no plumbing. | Plumbing only. |
|--------------------------|--------------------|-----------------------------|-----------------------------|----------------|
| Gleason & Humphrey ..... | \$7,240            | \$178                       | \$6,600                     |                |
| H. E. Burgess .....      | 7,517              |                             | 6,317                       | \$1,200        |
| D. F. Mockabee .....     | 7,722              | 159                         | 7,078                       |                |
| Geo. W. Corbett .....    | 8,100              | 175                         | 8,000                       |                |
| E. I. Hannan .....       |                    |                             |                             | 644            |

*Proposals received May 18, 1901, for iron fence around Western High School.*

| Design.   | Champion Iron Co. (per foot). | A. F. Jorss (per foot). | Barber & Ross. <sup>1</sup> |
|-----------|-------------------------------|-------------------------|-----------------------------|
| 139 ..... | \$1.02                        |                         |                             |
| 140 ..... | 1.17                          |                         |                             |
| 141 ..... | 1.08                          |                         |                             |
| 142 ..... | 1.23                          |                         |                             |
| 143 ..... | .92                           |                         |                             |
| 144 ..... | 1.00                          |                         |                             |
| A .....   |                               | \$1.20                  |                             |
| B .....   |                               | 1.40                    |                             |
| C .....   |                               | 1.45                    |                             |
| D .....   |                               | 1.25                    |                             |

<sup>1</sup> Bid informal.

*Schedule of proposals for constructing four-room school building on lots 61 to 68, block 5, Kenilworth, Anacostia, opened June 15, 1901.*

| Bidder.                  | Dark red brick, Seneca red sandstone trimmings. | Light brick, Indiana limestone trimmings. | Dark red brick, Indiana limestone trimmings. |
|--------------------------|-------------------------------------------------|-------------------------------------------|----------------------------------------------|
| Pavarini & Greer .....   | \$25,500                                        | \$26,000                                  | \$24,500                                     |
| Gleeson & Humphrey ..... | 26,000                                          | 27,000                                    |                                              |

*Schedule of proposals for constructing four-room school building on lots 47 to 51, block 4, Twining City, Prout street, opened June 15, 1901.*

| Bidder.                  | Dark red brick, Seneca red sandstone trimmings. | Light brick, Indiana limestone trimmings. | Dark red brick, Indiana limestone trimmings. |
|--------------------------|-------------------------------------------------|-------------------------------------------|----------------------------------------------|
| Pavarini & Greer .....   | \$25,500                                        | \$26,000                                  | \$24,500                                     |
| Gleeson & Humphrey ..... | 26,000                                          | 27,000                                    |                                              |

*Schedule of proposals for heating and ventilating school building, Fifteenth street NE., between Gales and Rosedale streets, opened July 2, 1900.*

| Bidder.                 | Amount.  |             |
|-------------------------|----------|-------------|
|                         | Hot air. | Steam heat. |
| H. I. Gregory .....     | \$2,450  |             |
| McGinnis-Smith Co. .... |          | \$3,958     |

*Schedule of proposals for repairs to and changes in plumbing in the Force School building, opened July 26, 1900.*

| Bidder.                 | Amount.    |
|-------------------------|------------|
| Jas. Nolan & Sons ..... | \$8,181.00 |
| E. J. Hannan .....      | 7,972.50   |
| S. S. Shedd & Bro. .... | 7,695.45   |

*Schedule of proposals received May 4, 1901, for changes in plumbing in hospital ward No. 4, Washington Asylum grounds.*

| Bidder.                 | Amount. |
|-------------------------|---------|
| S. S. Shedd & Bro. .... | \$1,079 |
| Jas. Nolan & Sons ..... | 996     |
| E. J. Hannan .....      | 840     |

*Schedule of proposals received June 18, 1901, for the construction of urinals.*

| Bidder.                 | Four urinals. | One urinal. |
|-------------------------|---------------|-------------|
| M. B. Casey .....       | \$3,167.30    | \$804       |
| E. J. Hannan .....      | 2,648.00      | 672         |
| Jas. Nolan & Sons ..... | 2,616.00      | 663         |
| Win. Rothwell .....     | 2,500.00      | 611         |
| S. S. Shedd & Bro. .... | 2,004.00      | 524         |

*Schedule of proposals received for repairs to and changes in plumbing in Randall and Lincoln schools.*

| Bidder.                  | Randall. | Lincoln. |
|--------------------------|----------|----------|
| James Nolan & Sons ..... | \$6,000  | \$3,865  |
| E. J. Hannan .....       | 5,447    | 4,000    |
| William Rothwell .....   | 5,338    | 3,997    |
| S. S. Shedd & Bro. ....  | 5,136    | 3,954    |

*Schedule of proposals for furnishing and setting in place two steam boilers at Franklin School building, opened July 18, 1900.*

| Bidder.                                          | Amount. |
|--------------------------------------------------|---------|
| W. H. Larman .....                               | \$2,535 |
| Warren W. Biggs Heating and Ventilating Co. .... | 2,511   |
| Forsberg & Murray .....                          | 2,157   |



*Proposals for constructing a rubble masonry wall, opened November 3, 1900.*

| Bidder.                | Per cubic yard. |
|------------------------|-----------------|
| Lyons Brothers .....   | \$5.24          |
| M. F. Talty .....      | 5.50            |
| Pavarini & Greer ..... | 6.00            |

*Schedule of proposals for constructing two gate houses at Brightwood Reservoir, opened July 7, 1900.*

| Bidder.                  | White marble on granite base. | Granite. | Light clouded marble, similar to that in Corcoran Art Gallery. | Cherokee, Ga. marble on granite base. | Pennsylvania marble on granite base. |
|--------------------------|-------------------------------|----------|----------------------------------------------------------------|---------------------------------------|--------------------------------------|
| D. F. Mockabee .....     | \$24,154                      | \$23,198 | \$22,365                                                       |                                       |                                      |
| J. F. Manning & Co. .... | 23,980                        |          |                                                                |                                       |                                      |
| Antonio Malnati .....    | 23,900                        | 22,750   |                                                                |                                       |                                      |
| John Hughes, jr .....    | 23,292                        | 22,100   |                                                                |                                       |                                      |
| W. A. Kimmel .....       |                               |          |                                                                | \$19,991                              | \$19,991                             |

*Schedule of proposals for furnishing and erecting fencing on coping at Brightwood Reservoir, opened May 25, 1901.*

| Bidder.                      | Cost.   | Bidder.                | Cost.   |
|------------------------------|---------|------------------------|---------|
| A. F. Jorss .....            | \$1,550 | Fred. J. White .....   | \$1,920 |
| C. A. Schneider's Sons ..... | 1,550   | Chas. White & Co ..... | 2,290   |

*Schedule of proposals received May 4, 1901, for constructing two gate houses at the Brightwood Reservoir.*

| Bidder.              | Amount.  | Bidder.                     | Amount.  |
|----------------------|----------|-----------------------------|----------|
| W. A. Kimmel .....   | \$16,053 | Sam. J. Prescott & Co ..... | \$17,741 |
| D. F. Mockabee ..... | 19,922   | Antonio Malnati .....       | 21,168   |

*Schedule of proposals for furnishing and erecting two 20,000,000-gallon pumping engines, received June 30, 1900.*

| Bidder.                                               | On D. C. specifications without modification. | On D. C. specifications, but with direct connected auxiliaries. | On D. C. specifications, but with direct and independent auxiliaries. | Rotary pumps driven by vertical triple expansion engines. | Rotary pumps driven by vertical quadruple expansion engines 250 pounds steam power. | Same as preceding, but including boilers. |
|-------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------|
| The Edw. P. Allis Co., Milwaukee, Wis. <sup>1</sup>   | \$210,000                                     | \$148,000                                                       | \$151,000                                                             |                                                           |                                                                                     |                                           |
| Camden Iron Works, Philadelphia, Pa. <sup>2</sup>     | 171,000                                       |                                                                 | 170,000                                                               |                                                           |                                                                                     |                                           |
| Holly Manufacturing Co., Lockport, N. Y. <sup>2</sup> | 216,525                                       | 181,790                                                         |                                                                       |                                                           |                                                                                     |                                           |
| The P. H. & F. M. Roots Co., Connersville, Ind.       | <sup>2</sup> 350,000                          |                                                                 |                                                                       | <sup>3</sup> \$229,000                                    | <sup>3</sup> \$219,000                                                              | <sup>3</sup> \$230,000                    |

<sup>1</sup> Formal in all respects.  
<sup>2</sup> Formal, except that no evidence is submitted, as required in paragraph 1 of specifications, that firm has built engines of size and type specified.  
<sup>3</sup> Informal. Rotary pumps specified and duty based on foot-pounds of work per million British units.

*Schedule of proposals for sewerage pumping station, opened February 16, 1901.*

| Bidder.                | Amount.  | Bidder.                                    | Amount.  |
|------------------------|----------|--------------------------------------------|----------|
| Camden Iron Works..... | \$11,811 | Henry R. Worthington.....                  | \$15,425 |
| Camden Iron Works..... | 16,361   | United Engineering and Contracting Co..... | 26,745   |

<sup>1</sup> Alternate bid.*Schedule of proposals to furnish engine, wheel, shaft, etc., for the harbor boat "Vigilant," opened April 6, 1901.*

| Bidder.                                 | Amount. |
|-----------------------------------------|---------|
| The James Clark Co., Baltimore, Md..... | \$4,725 |
| W. S. Moore's Sons, Alexandria, Va..... | 2,985   |
| Forsberg & Murray.....                  | 2,688   |

*Schedule of proposal to furnish two combination chemical and hose wagons for the fire department, received September 5, 1900.*

| Bidder.                     | Amount. |
|-----------------------------|---------|
| Chas. T. Holloway & Co..... | \$3,600 |

*Schedule of proposal for placing new boiler in the harbor boat "Vigilant," received September 12, 1900.*

| Bidder.              | Amount. |
|----------------------|---------|
| H. Boswell & Co..... | \$1,500 |

*Proposals for removing certain buildings and obstructions in the line of Eleventh street extended, opened October 13, 1900.*

| Bidder.              | Item 1. | Item 2. | Item 3. | Item 4. | Item 5. | Item 6. |
|----------------------|---------|---------|---------|---------|---------|---------|
| Geo. Simmons.....    |         |         |         |         | \$210   |         |
| Fannie E. Pate.....  | \$10.75 |         |         |         |         |         |
| Edwin Mormann.....   |         | \$350   |         | \$74    | 100     | \$25    |
| Chas. M. King.....   |         | 500     |         | 200     |         |         |
| Rosa E. Gerhold..... |         |         | \$15    |         |         |         |

*Schedule of proposals received June 15, 1901, for introducing water and sewers into certain premises.*

| Bidder.                | A.       | B.       | C.       | D.       | E.       |
|------------------------|----------|----------|----------|----------|----------|
| Jas. Nolan & Sons..... | \$513.46 | \$409.53 | \$463.64 | \$197.56 | \$213.53 |
| S. S. Shedd & Bro..... | 360.00   | 225.50   | 298.25   | 113.50   | 162.00   |
| M. B. Casey.....       | 339.00   | 190.00   | 191.00   | 124.00   | 174.00   |

*Schedule of proposals received June 1, 1901, for furnishing Portland cement.*

| Bidder.                        | Property yard. | F. o. b. B. and O. | F. o. b. P., W. and B. |
|--------------------------------|----------------|--------------------|------------------------|
| Lehigh Portland Cement Co..... | \$1.44         | \$1.40             | \$1.40                 |
| Lawrence Cement Co.....        | 1.45           | 1.40               | 1.40                   |
| Alpha Portland Cement Co.....  | 1.46½          | 1.41½              | 1.41½                  |
| National Mortar Co.....        | 1.53           | -----              | 1.48                   |
| Atlas Portland Cement Co.....  | 1.54           | 1.49               | 1.49                   |
| Cranford Paving Co.....        | 2.25           | 2.20               | 2.20                   |
| Brennan Construction Co.....   | 1.59           | 1.53               | 1.53                   |

*Schedule of proposals received June 1, 1901, for furnishing natural hydraulic cement.*

|                                                                                   | Jas. H. McGill. | National Mortar Co. | John Bullock & Son. |
|-----------------------------------------------------------------------------------|-----------------|---------------------|---------------------|
| Canal street between Delaware avenue and First per barrel..                       | \$0.64          | \$0.68½             | \$0.82              |
| F. o. b. Washington, Baltimore and Ohio R. R.....do.....                          | .59             | .62                 | .72                 |
| F. o. b. Washington, Philadelphia, Wilmington and Baltimore R. R.....per barrel.. | .66½            | -----               | .75                 |

*Schedule of proposals for furnishing cast-iron water pipe, opened July 7, 1900.*

| Bidder.                                          | 12-inch.        | 4-inch.         | 3-inch.         | Total bid.  | Remarks.                                         |
|--------------------------------------------------|-----------------|-----------------|-----------------|-------------|--------------------------------------------------|
|                                                  | <i>Per ton.</i> | <i>Per ton.</i> | <i>Per ton.</i> |             |                                                  |
| M. J. Drummond & Co.....                         | \$25.85         | \$27.50         | \$28.50         | \$10,168.60 | On cars Pennsylvania R.R.                        |
| United States Cast Iron Pipe and Foundry Co..... | 24.90           | 26.90           | 28.90           | 9,745.20    | On wharf; if on cars add 85 cents per gross ton. |
| Camden Iron Works.....                           | 24.22           | 26.18           | 27.75           | 9,563.88    | On wharf.                                        |

*Schedule of proposals for furnishing cast-iron water pipe, opened October 3, 1900.*

| Bidder.                                          | Per ton. | Cost.       |
|--------------------------------------------------|----------|-------------|
| United States Cast Iron Pipe and Foundry Co..... | \$23.40  | \$18,720.00 |
| M. J. Drummond & Co.....                         | 23.70    | 18,960.00   |
| Camden Iron Works.....                           | 23.88    | 19,104.00   |

*Proposals for furnishing granite curbing, opened October 27, 1900.*

| Bidder.                                 | 8 by 8 inches straight. | 8 by 8 inches circular. | 6 by 20 inches straight. | 6 by 20 inches circular. |
|-----------------------------------------|-------------------------|-------------------------|--------------------------|--------------------------|
|                                         | <i>Per foot.</i>        | <i>Per foot.</i>        | <i>Per foot.</i>         | <i>Per foot.</i>         |
| Francis Jones & Co.....                 | \$0.68½                 | \$0.90                  | \$0.77½                  | \$1.10                   |
| J. Merrick Horn.....                    | .67                     | .87                     | .82                      | 1.15                     |
| J. H. Poddicord & Son.....              | .75                     | 1.50                    | .95                      | 1.95                     |
| Bath Granite Co.....                    | 1.35                    | 2.40                    | 1.20                     | 2.20                     |
| Venable Bros.....                       | .63                     | .84                     | .75½                     | .94                      |
| Geo. Peirce.....                        | .95                     | 1.33                    | 1.09                     | 1.47                     |
| Do.....                                 | -----                   | -----                   | -----                    | -----                    |
| Silas C. Doby.....                      | .66                     | .88                     | .76                      | .90                      |
| Cape Ann Granite Co. <sup>1</sup> ..... | -----                   | -----                   | -----                    | -----                    |

<sup>1</sup> Sample received, but no bid.

## 190 OPERATIONS OF THE ENGINEER DEPARTMENT, D. C.

Schedule of proposals received June 27, 1901, for granite curbing.

| Bidder.                              | 6 by 20<br>inches<br>straight. | 6 by 20<br>inches<br>circular. | 8 by 8<br>inches<br>straight. | 8 by 8<br>inches<br>circular. |
|--------------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|
| Rowan Granite Co. ....               | \$0.70                         | \$1.00                         | \$0.68                        | \$0.90                        |
| Dennis Mountain Granite Quarry ..... | .74                            | .98                            | .68                           | .88                           |
| Georgia Rough and Cut Stone Co. .... | .77½                           | 1.25                           | .67                           | 1.00                          |
| Francis Jones & Co. ....             | .79½                           | 1.25                           | .74½                          | 1.15                          |
| Brantley & Daley. ....               | .80                            | 1.10                           | .72                           | 1.00                          |
| Venable Bros. ....                   | 1.90                           | 1.25                           | .80                           | 1.15                          |
| Chase Granite Co. ....               | 1.06½                          | 1.20½                          | .94                           | 1.05½                         |

Proposals for furnishing special taper section vitrified sewer invert bricks, opened November 7, 1900.

| Bidders.                                            | Price per<br>M. |
|-----------------------------------------------------|-----------------|
| American Clay Manufacturing Co. of New Jersey ..... | \$30.00         |
| Guise Brick and Stone Co. ....                      | 14.56           |
| Mack Manufacturing Co. ....                         | 28.55           |

Schedule of bids received June 1, 1901, for furnishing terra-cotta sewer pipe, branches, invert blocks, and bricks.

| Material.               | Poto-<br>mac<br>Terra<br>Cotta<br>Co. | Ameri-<br>can<br>Sewer<br>Pipe<br>Co. | The<br>Robin-<br>son<br>Bros.<br>Co. | Angus<br>La-<br>mond. | Mack<br>Manu-<br>factur-<br>ing Co. | Savage<br>Fire<br>Brick<br>Co. | Wm.<br>Wirt<br>Clarke<br>& Sons. | Jas. H.<br>Weich. |
|-------------------------|---------------------------------------|---------------------------------------|--------------------------------------|-----------------------|-------------------------------------|--------------------------------|----------------------------------|-------------------|
| Terra-cotta sewer pipe: |                                       |                                       |                                      |                       |                                     |                                |                                  |                   |
| 24-inch .....           | \$0.825                               | \$0.84825                             | \$0.965                              |                       |                                     |                                |                                  |                   |
| 21-inch .....           | .64                                   | .6525                                 | .745                                 |                       |                                     |                                |                                  |                   |
| 18-inch .....           | .42                                   | .4457                                 | .51                                  |                       |                                     |                                |                                  |                   |
| 15-inch .....           | .32                                   | .32625                                | .38                                  |                       |                                     |                                |                                  |                   |
| 12-inch .....           | .21                                   | .22185                                | .26                                  | \$0.205               |                                     |                                |                                  |                   |
| 10-inch .....           | .165                                  | .16905                                | .20                                  |                       |                                     |                                |                                  |                   |
| 8-inch .....            | .12                                   | .1305                                 | .15                                  | .11                   |                                     |                                |                                  |                   |
| 6-inch .....            | .08                                   | .087                                  | .10                                  | .07                   |                                     |                                |                                  |                   |
| Terra-cotta Y branches: |                                       |                                       |                                      |                       |                                     |                                |                                  |                   |
| 24 by 6 inch .....      | .325                                  | 3.55509                               | 4.10                                 |                       |                                     |                                |                                  |                   |
| 21 by 6 inch .....      | .250                                  | 2.73375                               | 3.18                                 |                       |                                     |                                |                                  |                   |
| 18 by 6 inch .....      | .175                                  | 1.85895                               | 2.20                                 |                       |                                     |                                |                                  |                   |
| 15 by 6 inch .....      | .125                                  | 1.36809                               | 1.60                                 |                       |                                     |                                |                                  |                   |
| 12 by 6 inch .....      | .90                                   | .93069                                | 1.20                                 |                       |                                     |                                |                                  |                   |
| 10 by 6 inch .....      | .70                                   | .71199                                | .90                                  |                       |                                     |                                |                                  |                   |
| 8 by 6 inch .....       | .55                                   | .5887                                 | .60                                  |                       |                                     |                                |                                  |                   |
| Reducers, 8 to 6 inch.  |                                       |                                       |                                      |                       |                                     |                                |                                  |                   |
| Bends:                  |                                       |                                       |                                      |                       |                                     |                                |                                  |                   |
| 6-inch .....            | .50                                   | .522                                  | .51                                  |                       |                                     |                                |                                  |                   |
| 8-inch .....            | .29                                   | .319                                  | .32                                  | .25                   |                                     |                                |                                  |                   |
| 8-inch .....            | .50                                   | .522                                  | .51                                  | .40                   |                                     |                                |                                  |                   |
| Invert blocks           |                                       |                                       |                                      |                       |                                     |                                |                                  |                   |
| Invert bricks:          |                                       | .51                                   |                                      | .50                   |                                     |                                |                                  |                   |
| A .....                 |                                       | 16.75                                 |                                      |                       | \$15.44                             | \$16.25                        | \$16.00                          | \$17.55           |
| B .....                 |                                       | 15.75                                 |                                      |                       |                                     |                                | 16.50                            |                   |

Schedule of bids received June 1, 1901, for furnishing sewer brick.

| Bidder.                                                                 | Standard<br>Brick Co. | Wm. Wirt<br>Clarke &<br>Sons. |
|-------------------------------------------------------------------------|-----------------------|-------------------------------|
| In city of Washington .....                                             | \$9.93                | \$9.25                        |
| In city of Georgetown .....                                             | 10.33                 |                               |
| County of Washington, east of Eastern Branch .....                      | 10.33                 |                               |
| County of Washington, between Eastern Branch and Rock Creek .....       | 10.42                 |                               |
| County of Washington, west of Rock Creek .....                          | 11.92                 |                               |
| At bidder's works .....                                                 | 8.93                  | 6.00                          |
| Hauling brick beyond limits westward for each mile or fraction thereof. | .75                   | 0.50                          |
| District of Columbia property yard .....                                |                       | 9.80                          |

*Schedule of proposals received June 1, 1901, for furnishing red sidewalk paving bricks.*

| Bidder.                        | Price per M. |
|--------------------------------|--------------|
| W. Wirt Clarke & Sons.....     | \$11.55      |
| Frederick Brick Works.....     | 11.75        |
| Guisse Brick and Stone Co..... | 15.50        |

*Schedule of bids received June 1, 1901, for furnishing vitrified paving blocks.*

| Bidder.                             | Number per square yard. | Whole block, per M. | Half block, per M. |
|-------------------------------------|-------------------------|---------------------|--------------------|
| Joseph P. Mack.....                 | 43                      | \$20.82             | \$18.00            |
| Camden Clay Co.....                 | 43                      | 20.90               | 10.95              |
| American Sewer Pipe Co.....         | 42                      | 20.96               | 13.00              |
| Guisse Brick and Stone Co.....      | 44.50                   | 21.25               | 15.00              |
| W. Wirt Clarke & Sons.....          | 42                      | 21.35               | 13.50              |
| Do.....                             |                         | 21.35               | 13.50              |
| Portsmouth (Ky.) Fire Brick Co..... | .45                     | 21.50               | 12.70              |
| Eastern Paving Brick Co.....        | .43                     | 22.00               | 12.00              |
| W. Wirt Clarke & Sons.....          | 41                      | 25.50               |                    |
| Do.....                             | 42                      | 24.55               | 14.55              |
| Harris Brick Co.....                | 42                      | 26.25               | 14.00              |
| Mack Manufacturing Co.....          | 42                      | 21.33               | 18.00              |

*Schedule of proposals received June 1, 1901, for furnishing sand and gravel.*

| Bidder.                                 | Paving and concrete sand. | Building sand. | Screened gravel. |
|-----------------------------------------|---------------------------|----------------|------------------|
| Columbia National Sand Dredging Co..... | \$0.42                    | \$0.49         | \$0.69           |
| L. E. Smoot.....                        | .44                       | .52½           | .80              |

*Schedule of proposals for curb and corporation cocks, opened February 2, 1901.*

CURB COCKS.

| Bidder.                                     |  | ¾ inch. | 1 inch. | 1½ inches. | Cost.      |
|---------------------------------------------|--|---------|---------|------------|------------|
| A. P. Smith Manufacturing Co. {Inverted...} |  | \$1.30  | \$2.00  | \$3.00     | \$2,380.00 |
| {Direct...}                                 |  | .75     | 1.35    | 2.00       | 1,462.50   |
| H. Mueller Manufacturing Co. {Inverted...}  |  | 1.22    | 2.14    | 3.41       | 2,388.50   |
| {Direct...}                                 |  | .75     | 1.32    | 2.10       | 1,470.00   |
| C. J. McCubbin..... {Inverted...}           |  | 1.08    | 1.90    | 3.00       | 2,113.00   |

CORPORATION COCKS.

| Bidder.                           | ¾ inch. | ¾ inch. | ¾ inch. | 1 inch. | 1½ inches. | 1½ inches. | Cost.      |
|-----------------------------------|---------|---------|---------|---------|------------|------------|------------|
| A. P. Smith Manufacturing Co..... | \$0.75  | \$1.00  | \$1.20  | \$1.75  | \$3.00     | \$4.00     | \$1,670.00 |
| H. Mueller Manufacturing Co.....  | .77½    | .97     | 1.34    | 1.89    | 3.71       | 4.77       | 1,783.10   |

*Schedule of bids for furnishing fire hydrants, opened February 23, 1901.*

| Bidder.                                   | Cost, each. |
|-------------------------------------------|-------------|
| M. J. Drummond & Co., New York, N. Y..... | \$41.40     |
| Camden Iron Works, Philadelphia, Pa.....  | 43.50       |
| Ellieott Machine Co., Baltimore, Md.....  | 49.75       |

*Schedule of bids received June 1, 1901, for hauling.*

| Bidder.                                                                                                                                                                                               | Sand,<br>per<br>cubic<br>yard. | Gravel,<br>per<br>cubic<br>yard. | Paving<br>bricks,<br>per M. | Paving<br>blocks,<br>per M. | Curbing.           |                   | Pipe,<br>per<br>ton. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------|-----------------------------|-----------------------------|--------------------|-------------------|----------------------|
|                                                                                                                                                                                                       |                                |                                  |                             |                             | 6 by 20<br>inches. | 8 by 8<br>inches. |                      |
| <b>In the city of Washington:</b>                                                                                                                                                                     |                                |                                  |                             |                             |                    |                   |                      |
| Littlefield, Alvord & Co.....                                                                                                                                                                         | \$0.40                         | \$0.40                           | \$1.18                      | \$1.68                      | \$0.05             | \$0.04            | \$0.50               |
| George W. Knox Express Co.....                                                                                                                                                                        | .42                            | .42                              | 1.19                        | 1.69                        | .05                | .04               | .50                  |
| The Springmann Express Co.....                                                                                                                                                                        | .60                            | .60                              | 1.30                        | 1.80                        | .06                | .05               | .50                  |
| Merchants' Parcel Delivery Co.....                                                                                                                                                                    |                                |                                  |                             |                             |                    |                   | .50                  |
| <b>In the city of Georgetown:</b>                                                                                                                                                                     |                                |                                  |                             |                             |                    |                   |                      |
| Littlefield, Alvord & Co.....                                                                                                                                                                         | .49                            | .49                              | 1.29                        | 1.89                        | .05                | .04               | .69                  |
| George W. Knox Express Co.....                                                                                                                                                                        | .50                            | .50                              | 1.33                        | 1.90                        | .05                | .04               | .50                  |
| The Springmann Express Co.....                                                                                                                                                                        | .75                            | .75                              | 1.45                        | 2.00                        | .06                | .05               | .50                  |
| Merchants' Parcel Delivery Co.....                                                                                                                                                                    |                                |                                  |                             |                             |                    |                   | .50                  |
| <b>In county of Washington, east of Eastern Branch:</b>                                                                                                                                               |                                |                                  |                             |                             |                    |                   |                      |
| Littlefield, Alvord & Co.....                                                                                                                                                                         | .40                            | .40                              | 1.18                        | 1.68                        | .05                | .04               | .59                  |
| George W. Knox Express Co.....                                                                                                                                                                        | .50                            | .50                              | 1.33                        | 1.90                        | .05                | .04               | .50                  |
| The Springmann Express Co.....                                                                                                                                                                        | .60                            | .60                              | 1.30                        | 1.80                        | .06                | .05               | .45                  |
| Merchants' Parcel Delivery Co.....                                                                                                                                                                    |                                |                                  |                             |                             |                    |                   | .50                  |
| <b>In county of Washington, between Eastern Branch and Rock Creek, not farther than 1½ miles from city limits:</b>                                                                                    |                                |                                  |                             |                             |                    |                   |                      |
| Littlefield, Alvord & Co.....                                                                                                                                                                         | .49                            | .49                              | 1.29                        | 1.89                        | .05                | .04               | .69                  |
| George W. Knox Express Co.....                                                                                                                                                                        | .50                            | .50                              | 1.35                        | 1.95                        | .05                | .04               | .70                  |
| The Springmann Express Co.....                                                                                                                                                                        | .70                            | .70                              | 1.60                        | 2.00                        | .06                | .06               | .65                  |
| Merchants' Parcel Delivery Co.....                                                                                                                                                                    |                                |                                  |                             |                             |                    |                   | .65                  |
| <b>In county of Washington, west of Rock Creek, not farther than 1 mile from limits of the city of Georgetown:</b>                                                                                    |                                |                                  |                             |                             |                    |                   |                      |
| Littlefield, Alvord & Co.....                                                                                                                                                                         | .49                            | .49                              | 1.29                        | 1.89                        | .05                | .04               | .69                  |
| George W. Knox Express Co.....                                                                                                                                                                        | .50                            | .50                              | 1.35                        | 1.95                        | .05                | .04               | .70                  |
| The Springmann Express Co.....                                                                                                                                                                        | .85                            | .85                              | 1.60                        | 2.00                        | .07                | .06               | .65                  |
| Merchants' Parcel Delivery Co.....                                                                                                                                                                    |                                |                                  |                             |                             |                    |                   | .65                  |
| <b>Additional hauling. For deliveries at points other than described above (to be added to price for deliveries at nearest point described above) for each additional mile or fraction of a mile:</b> |                                |                                  |                             |                             |                    |                   |                      |
| Littlefield, Alvord & Co.....                                                                                                                                                                         | .09                            | .09                              | .19                         | .19                         | .00½               | .00½              | .09                  |
| George W. Knox Express Co.....                                                                                                                                                                        | .09                            | .09                              | .20                         | .30                         | .01                | .01               | .10                  |
| The Springmann Express Co.....                                                                                                                                                                        | .15                            | .15                              | .22                         | .32                         | .01                | .01               | .10                  |
| Merchants' Parcel Delivery Co.....                                                                                                                                                                    |                                |                                  |                             |                             |                    |                   | .10                  |
| <b>Unloading from cars and hauling broken stone a not greater distance than 1 mile from points of unloading, for cars delivered within city limits and Eckington yard:</b>                            |                                |                                  |                             |                             |                    |                   |                      |
| Littlefield, Alvord & Co.....                                                                                                                                                                         |                                | .34                              |                             |                             |                    |                   |                      |
| The Springmann Express Co.....                                                                                                                                                                        |                                | .50                              |                             |                             |                    |                   |                      |
| <b>Additional hauling. A distance in excess of 1 mile from point of unloading (for each additional mile or fraction of a mile over and above first mile):</b>                                         |                                |                                  |                             |                             |                    |                   |                      |
| Littlefield, Alvord & Co.....                                                                                                                                                                         |                                | .09                              |                             |                             |                    |                   |                      |
| The Springmann Express Co.....                                                                                                                                                                        |                                | .15                              |                             |                             |                    |                   |                      |

The following is a list of employees who are paid from various appropriations and are employed in the record office:

One clerk, at \$4.50 per diem, "Surface appropriations."

Three clerks, at \$4 per diem, pro rata, "Sewer, water, and surface appropriations."

One clerk, at \$3 per diem, pro rata, "Sewer, water, and surface appropriations."

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